

STIC-Biotech/ChemLib

71084

CRFE

Fr m: Schmidt, Mary
Sent: Tuesday, July 16, 2002 4:42 PM
To: STIC-Biotech/ChemLib
Subject: sequence search request 09/716,320

please search seq id no. 3-- this is a short antisense sequence, so please size limit the results to less than 100 bases.
please include an interference search also.

thanks,
melissa
au 1635
11e12 mailboxes

Edward Hart
Technical Info. Specialist
STIC/Biotech
CMI 6B02 Tel: 305-9203

STIC
JUL 16 2002
3 15 PM

nuc-3 (15 residues)

Searcher: _____
Phone: _____
Location: _____
Date Picked Up: 8/18/02
Date Completed: 8/22/02
Searcher Prep/Review: _____
Clerical: _____
Online time: _____

TYPE OF SEARCH: /
NA Sequences: _____
AA Sequences: _____
Structures: _____
Bibliographic: _____
Litigation: _____
Full text: _____
Patent Family: _____
Other: _____

VENDOR/COST (where applic.)
STN: _____
DIALOG: _____
Questel/Orbit: _____
DRLink: _____
Lexis/Nexis: _____
Sequence Sys.: 06
WWW/Internet: _____
Other (specify): _____

THIS PAGE BLANK (USPTO)

Result No.	Score	Query Match	Length	DB ID	Description
1	100	100	100	1	...
2	95	95	95	2	...
3	90	90	90	3	...
4	85	85	85	4	...
5	80	80	80	5	...
6	75	75	75	6	...
7	70	70	70	7	...
8	65	65	65	8	...
9	60	60	60	9	...
10	55	55	55	10	...
11	50	50	50	11	...
12	45	45	45	12	...
13	40	40	40	13	...
14	35	35	35	14	...
15	30	30	30	15	...
16	25	25	25	16	...
17	20	20	20	17	...
18	15	15	15	18	...
19	10	10	10	19	...
20	5	5	5	20	...

Query Match 100.0%; Score 15; DB 6; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 tccatggtgctcact 15
Db 4 TCCATGGTCTCACT 18

RESULT 2
AX355038
LOCUS AX355038 19 bp DNA linear PAT 06-FEB-2002
DEFINITION Sequence 66 from Patent WO0197843.
ACCESSION AX355038
VERSION AX355038.1 GI:18619705
KEYWORDS
SOURCE synthetic construct.
ORGANISM synthetic construct.
REFERENCE 1 (sites)
AUTHORS Weiner, G. and Hartmann, G.
TITLE Methods for enhancing antibody-induced cell lysis and treating cancer.
JOURNAL Patent: WO 0197843-A 66 27-DEC-2001;
UNIVERSITY OF IOWA RESEARCH FOUNDATION (US)
FEATURES Location/Qualifiers
source
1..19
/organism="synthetic construct"
/db_xref="taxon:32630"
/note="Synthetic oligonucleotide-phosphorothioate backbone"

BASE COUNT 3 a 6 c 5 g 5 t
ORIGIN

Query Match 100.0%; Score 15; DB 6; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 tccatggtgctcact 15
Db 4 TCCATGGTCTCACT 18

RESULT 3
I34918/c
LOCUS I34918 24 bp DNA linear PAT 13-MAY-1997
DEFINITION Sequence 4 from patent US 5599704.
ACCESSION I34918
VERSION I34918.1 GI:2087886
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 24)
AUTHORS Thompson, J.D. and Draper, K.G.
TITLE ErbB2/new targeted ribozymes
JOURNAL Patent: US-5599704-A-4-04-FEB-1997;
FEATURES Location/Qualifiers
source
1..24
/organism="unknown"

BASE COUNT 6 a 7 c 8 g 3 t
ORIGIN

Query Match 100.0%; Score 15; DB 6; Length 24;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 tccatggtgctcact 15
Db 21 TCCATGGTCTCACT 7

Query Match 100.0%; Score 15; DB 6; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 tccatggtgctcact 15
Db 4 TCCATGGTCTCACT 18

RESULT 4
AR071406
LOCUS AR071406 15 bp DNA linear PAT 18-FEB-2000
DEFINITION Sequence 1 from patent US 5910583.
ACCESSION AR071406
VERSION AR071406.1 GI:7222294
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 15)
AUTHORS Marks, J.R., Vaughn, J.P. and Inglehart, J.D.
TITLE Antisense oligonucleotides against ERBB-2
JOURNAL Patent: US 5910583-A 1 08-JUN-1999;
FEATURES Location/Qualifiers
source
1..15
/organism="unknown"

BASE COUNT 2 a 6 c 3 g 4 t
ORIGIN

Query Match 93.3%; Score 14; DB 6; Length 15;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 tccatggtgctcact 14
Db 2 TCCATGGTCTCACT 15

RESULT 5
AX159179
LOCUS AX159179 51 bp DNA linear PAT 22-JUN-2001
DEFINITION Sequence 2507 from Patent WO0140521.
ACCESSION AX159179
VERSION AX159179.1 GI:14540510
KEYWORDS
SOURCE human.
ORGANISM Homo sapiens
REFERENCE 1 (bases 1 to 51)
AUTHORS Shimkets, R.A. and Leach, M.
TITLE Nucleic acids containing single nucleotide polymorphisms and methods of use thereof
JOURNAL Patent: WO 0140521-A 2507 07-JUN-2001;
FEATURES Location/Qualifiers
source
1..51
/organism="Homo sapiens"
/db_xref="taxon:9606"

misc_feature 26
/note="1 of 2 allelic variants (2508 is other entry)
Accession number CG39714236"

BASE COUNT 7 a 14 c 15 g 15 t
ORIGIN

Query Match 93.3%; Score 14; DB 6; Length 51;
Best Local Similarity 100.0%; Pred. No. 6.7e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 ccattggtgctcact 15
Db 17 CCATGGTCTCACT 30

RESULT 6
A45228
LOCUS A45228 14 bp DNA linear PAT 07-MAR-1997
DEFINITION Sequence 105 from Patent WO9517507.

ACCESSION A45228
 VERSION A45228.1 GI:2299723
 KEYWORDS
 SOURCE unclassified.
 ORGANISM unclassified.
 REFERENCE 1 (bases 1 to 14)
 AUTHORS Brysch,W., Schlingensiepen,K., Schlingensiepen,R. and Schlingensiepen,G.
 TITLE ANTISENSE NUCLEIC ACIDS FOR THE PREVENTION AND TREATMENT OF DISORDERS IN WHICH EXPRESSION OF c-erbB PLAYS A ROLE
 JOURNAL BIOGOSTIK GES (DE)
 COMMENT Patent: WO 9517507-A 105 29-JUN-1995;
 Other publication AU 1313095 950710.
 FEATURES source
 1..14
 /organism="unclassified"
 /db_xref="taxon:32644"
 BASE COUNT 2 a 4 c 4 g 4 t
 ORIGIN

 Query Match 86.7%; Score 13; DB 6; Length 14;
 Best Local Similarity 100.0%; Pred. No. 2.9e+03;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 QY 3 catggtgctact 15
 |||||
 Db 1 CATGGTGCTACT 13

 RESULT 7
 A88989
 LOCUS A88989 14 bp DNA linear PAT 22-JAN-2000
 DEFINITION Sequence 1137 from Patent WO9833904.
 ACCESSION A88989
 VERSION A88989.1 GI:6737559
 KEYWORDS
 SOURCE unclassified.
 ORGANISM unclassified.
 REFERENCE 1 (bases 1 to 14)
 AUTHORS Brysch,W. and Schlingensiepen,K.
 TITLE AN ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
 JOURNAL Patent: WO 9833904-A 1137 06-AUG-1998;
 BIOGOSTIK GES (DE); BRYSCH WOLFGANG (DE)
 FEATURES source
 1..14
 /organism="unclassified"
 /db_xref="taxon:32644"
 BASE COUNT 2 a 4 c 4 g 4 t
 ORIGIN

 Query Match 86.7%; Score 13; DB 6; Length 14;
 Best Local Similarity 100.0%; Pred. No. 2.9e+03;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 QY 3 catggtgctact 15
 |||||
 Db 1 CATGGTGCTACT 13

 RESULT 8
 A88177
 LOCUS A88177 16 bp DNA linear PAT 22-JAN-2000
 DEFINITION Sequence 325 from Patent WO9833904.
 ACCESSION A88177
 VERSION A88177.1 GI:6736747
 KEYWORDS
 SOURCE unclassified.
 ORGANISM unclassified.

REFERENCE 1 (bases 1 to 16)
 AUTHORS Brysch,W. and Schlingensiepen,K.
 TITLE AN ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
 JOURNAL Patent: WO 9833904-A 325 06-AUG-1998;
 BIOGOSTIK GES (DE); BRYSCH WOLFGANG (DE)
 FEATURES source
 1..16
 /organism="unclassified"
 /db_xref="taxon:32644"
 BASE COUNT 2 a 5 c 5 g 4 t
 ORIGIN

 Query Match 86.7%; Score 13; DB 6; Length 16;
 Best Local Similarity 100.0%; Pred. No. 2.9e+03;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 QY 3 catggtgctact 15
 |||||
 Db 1 CATGGTGCTACT 13

 RESULT 9
 A90144
 LOCUS A90144 16 bp DNA linear PAT 22-JAN-2000
 DEFINITION Sequence 325 from Patent EP0856579.
 ACCESSION A90144
 VERSION A90144.1 GI:6738658
 KEYWORDS
 SOURCE unclassified.
 ORGANISM unclassified.
 REFERENCE 1 (bases 1 to 16)
 AUTHORS Brysch,W.D. and Schlingensiepen,K.D.
 TITLE An antisense oligonucleotide preparation method
 JOURNAL Patent: EP 0856579-A 325 05-AUG-1998;
 BIOGOSTIK GES (DE)
 FEATURES source
 1..16
 /organism="unclassified"
 /db_xref="taxon:32644"
 BASE COUNT 2 a 5 c 5 g 4 t
 ORIGIN

 Query Match 86.7%; Score 13; DB 6; Length 16;
 Best Local Similarity 100.0%; Pred. No. 2.9e+03;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 QY 3 catggtgctact 15
 |||||
 Db 1 CATGGTGCTACT 13

 RESULT 10
 ARI37074
 LOCUS ARI37074 20 bp DNA linear PAT 16-JUN-2001
 DEFINITION Sequence 3 from patent US 6162965.
 ACCESSION ARI37074
 VERSION ARI37074.1 GI:14478324
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unclassified.
 REFERENCE 1 (bases 1 to 20)
 AUTHORS Hansen,G.
 TITLE Plant transformation methods
 JOURNAL Patent: US 6162965-A 3 19-DEC-2000;
 FEATURES source
 1..20
 /organism="unknown"
 BASE COUNT 4 a 4 c 7 g 5 t
 ORIGIN

Query Match 86.7%; Score 13; DB 6; Length 20;
 Best Local Similarity 100.0%; Pred. No. 2.9e+03;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 tccatggtgctca 13
 |||||
 Db 6 TCCATGGTGTCTCA 18

RESULT 11
 AX164704/c
 LOCUS AX164704 20 bp DNA linear PAT 22-JUN-2001
 DEFINITION Sequence 9 from Patent WO0136644.
 ACCESSION AX164704
 VERSION AX164704.1 GI:14545596
 KEYWORDS synthetic construct.
 SOURCE synthetic construct
 ORGANISM artificial sequence.
 REFERENCE 1 (bases 1 to 20)
 AUTHORS Rastelli, L., Levin, D., Taillon, B. and Andrew, D.P.
 TITLE Wnt-regulated cytokine-like polypeptide and nucleic acids encoding same

JOURNAL Patent: WO 0136644-A 9 25-MAY-2001;

Curagen Corporation (US)

Location/Qualifiers

1..20 /organism="synthetic construct"

/db_xref="taxon:32630"

/note="primer"

BASE COUNT 7 a 6 c 5 g 2 t

ORIGIN

Query Match 86.7%; Score 13; DB 6; Length 20;
 Best Local Similarity 100.0%; Pred. No. 2.9e+03;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 catggtgctcact 15
 |||||
 Db 20 CATGGTGTCTACT 8

RESULT 12
 AR122156
 LOCUS AR122156 26 bp DNA linear PAT 16-MAY-2001
 DEFINITION Sequence 18 from patent US 6165712.
 ACCESSION AR122156
 VERSION AR122156.1 GI:14106473
 KEYWORDS Unknown.
 SOURCE Unknown.
 ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 26)
 AUTHORS Foulkes, J. Gordon, Leichtfried, F.E., Pieler, C., Stephenson, J.R. and Case, C.C.

TITLE Methods of transcriptionally modulating expression of viral genes and genes useful for production of proteins

JOURNAL Patent: US 6165712-A 18 26-DEC-2000;

Location/Qualifiers

1..26

/organism="unknown"

BASE COUNT 2 a 11 c 8 g 5 t

ORIGIN

Query Match 86.7%; Score 13; DB 6; Length 26;
 Best Local Similarity 100.0%; Pred. No. 2.9e+03;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 catggtgctcact 15

|||||
 Db 1 CATGGTGTCTACT 13

RESULT 13

AR142598

LOCUS

DEFINITION

Sequence 6 from patent US 6203976.

ACCESSION

AR142598

VERSION

AR142598.1

GI:15103884

KEYWORDS

Unknown.

SOURCE

ORGANISM

Unclassified.

REFERENCE

1 (bases 1 to 26)

AUTHORS

Foulkes, J. Gordon, Leichtfried, F.E., Pieler, C. and Stephenson, J.R.

TITLE

Methods of preparing compositions comprising chemicals capable of transcriptional modulation

JOURNAL

Patent: US 6203976-A 6 20-MAR-2001;

Location/Qualifiers

1..26

/organism="unknown"

BASE COUNT 2 a 11 c 8 g 5 t

ORIGIN

Query Match 86.7%; Score 13; DB 6; Length 26;

Best Local Similarity 100.0%; Pred. No. 2.9e+03;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 catggtgctcact 15

|||||

Db 1 CATGGTGTCTACT 13

RESULT 14

AR054584/c

LOCUS

DEFINITION

Sequence 5 from patent US 5837447.

ACCESSION

AR054584

VERSION

AR054584.1

GI:5980161

KEYWORDS

Unknown.

SOURCE

ORGANISM

Unclassified.

REFERENCE

1 (bases 1 to 22)

AUTHORS

Gorski, J.

TITLE

Monitoring an immune response by analysis of amplified immunoglobulin or T-cell-receptor nucleic acid

JOURNAL

Patent: US 5837447-A 5 17-NOV-1998;

Location/Qualifiers

1..22

/organism="unknown"

BASE COUNT 6 a 3 c 8 g 5 t

ORIGIN

Query Match 82.7%; Score 12.4; DB 6; Length 22;

Best Local Similarity 92.9%; Pred. No. 7.2e+03;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 tccatggtgctcac 14

|||||

Db 21 TCCAAGGTGCTCAC 8

RESULT 15

AX161043/c

LOCUS

DEFINITION

Sequence 4371 from Patent WO0140521.

ACCESSION

AX161043

VERSION

AX161043.1

GI:14542374

KEYWORDS

Query Match 86.7%; Score 13; DB 6; Length 26;

Best Local Similarity 100.0%; Pred. No. 2.9e+03;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 catggtgctcact 15

|||||

Db 1 CATGGTGTCTACT 13

RESULT 16

AX161043/c

LOCUS

DEFINITION

Sequence 4371 from Patent WO0140521.

ACCESSION

AX161043

VERSION

AX161043.1

GI:14542374

KEYWORDS

Query Match 86.7%; Score 13; DB 6; Length 26;

Best Local Similarity 100.0%; Pred. No. 2.9e+03;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 catggtgctcact 15

|||||

Db 1 CATGGTGTCTACT 13

SOURCE human.
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 50)
 AUTHORS Shinkets, R.A. and Leach, M.
 TITLE Nucleic acids containing single nucleotide polymorphisms and
 methods of use thereof
 JOURNAL Patent: WO 0140521-A 4371 07-JUN-2001;
 Curagen Corporation (US)
 FEATURES
 source 1..50
 /organism="Homo sapiens"
 /db_xref="taxon:9606"
 misc_feature 25..26
 /note="Nucleotide deleted between bases 25 and 26"
 misc_feature 26
 Accession number cg43949223"
 BASE COUNT 16 a 12 c 15 g 7 t
 ORIGIN
 Query Match 82.7%; Score 12.4; DB 6; Length 50;
 Best Local Similarity 92.9%; Pred. No. 7.3e+03;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 tccatggtgctcac 14
 Db 31 TCCATGCTGCTGAC 18

Search completed: July 21, 2002, 03:51:41
 Job time: 18516 sec

THIS PAGE BLANK (USPTO)

GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: July 21, 2002, 02:44:51 ; Search time 203.9 seconds
(without alignments)
126.306 Million cell updates/sec

Title: US-09-716-320-3

Perfect score: 15

Sequence: 1 tccatggtgctcact 15

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 1736436 segs, 858457221 residues

Total number of hits satisfying chosen parameters: 2046006

Minimum DB seq length: 0

Maximum DB seq length: 100

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

- N_Geneseq_032802.*
- 1: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1980.DAT.*
 - 2: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1981.DAT.*
 - 3: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1982.DAT.*
 - 4: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1983.DAT.*
 - 5: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1984.DAT.*
 - 6: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1985.DAT.*
 - 7: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1986.DAT.*
 - 8: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1987.DAT.*
 - 9: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1988.DAT.*
 - 10: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1989.DAT.*
 - 11: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1990.DAT.*
 - 12: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1991.DAT.*
 - 13: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1992.DAT.*
 - 14: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1993.DAT.*
 - 15: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1994.DAT.*
 - 16: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1995.DAT.*
 - 17: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1996.DAT.*
 - 18: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1997.DAT.*
 - 19: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1998.DAT.*
 - 20: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA1999.DAT.*
 - 21: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA2000.DAT.*
 - 22: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA2001A.DAT.*
 - 23: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA2001B.DAT.*
 - 24: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/NA2001B.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	15	100.0	15	21	AAZ90403
2	15	100.0	19	22	AAF98894
3	15	100.0	24	14	AAQ52043
4	15	100.0	70	20	AAQ80767
5	14	93.3	15	19	AAV40434
6	14	93.3	51	22	AAI75566
7	13.4	89.3	24	19	AAV22685
8	13.4	89.3	29	22	AAQ09199
9	13	86.7	14	16	AAQ92762
Phosphorothioated					
Immunostimulatory					
Breast cancer spec					
Promoter region of					
US-1 antisense oli					
Human silent SNP c					
PCR primer HN40 us					
PCR primer #1 used					
c-erbB-2 antisense					

c 11	13	86.7	16	19	AAV48736
c 12	13	86.7	19	21	AAAS3776
c 13	13	86.7	19	22	AAAI5845
c 14	13	86.7	20	20	AAV84090
c 15	13	86.7	20	22	AAQ00677
c 16	12.4	82.7	20	21	AAV4062
c 17	12.4	82.7	22	20	AAV08115
c 18	12.4	82.7	47	20	AAZ01091
c 19	12.4	82.7	50	22	AAI77430
c 20	12.4	82.7	51	22	AAI75567
c 21	12.4	82.7	51	22	AAI77426
c 22	12.4	82.7	51	22	AAI77427
c 23	12.4	82.7	51	22	AAI77428
c 24	12	80.0	22	19	AAV17078
c 25	12	80.0	27	19	AAV36673
c 26	12	80.0	53	19	AAV36662
c 27	12	80.0	62	19	AAV36663
c 28	12	80.0	97	19	AAV17076
c 29	11.8	78.7	20	21	AAAI2081
c 30	11.8	78.7	22	21	AAAS2945
c 31	11.8	78.7	32	21	AAAS2982
c 32	11.8	78.7	42	21	AAAI2095
c 33	11.8	78.7	50	18	AAAT89212
c 34	11.8	78.7	50	22	AAH89655
c 35	11.8	78.7	51	21	AAV76472
c 36	11.8	78.7	51	21	AAV76473
c 37	11.8	78.7	51	22	AAH89654
c 38	11.8	78.7	54	17	AAAT50594
c 39	11.8	78.7	54	18	AAV1673
c 40	11.8	78.7	100	19	AAV59359
c 41	11.8	78.7	100	21	AAAI2495
c 42	11.6	77.3	39	21	AAA40195
c 43	11.6	77.3	39	21	AAA40196
c 44	11.6	77.3	39	22	AAH88090
c 45	11.6	77.3	39	22	AAH88091

ALIGNMENTS

RESULT 1

AAZ90403

ID AAZ90403 standard; DNA; 15 BP.

XX AC AAZ90403;

XX DT 30-MAY-2000 (first entry)

XX DE Phosphorothioated ASO directed against HER-2 gene.

XX DE Radiation; drug resistance; HER-2; raf-1; radioresistant; tumour;

XX DE cancer; restenosis; osteoarthritis; neurological; pre-eclampsia;

XX DE intestinal abnormality; antisense; ss.

XX OS Homo sapiens.

XX PN US6027892-A.

XX PD 22-FEB-2000.

XX PF 16-DEC-1997; 97US-0991830.

XX PR 30-DEC-1996; 96US-0034160.

XX PA (CHAN/) CHANG E H.

XX PA (PIRO/) PIROLLO K F.

XX PI Chang EH, Pirollo KF;

XX DR WPI; 2000-194828/17.

XX PT Reducing radiation or drug resistance in a cell comprises introduction

ErbB-2 gene antise
Forward primer for
Human HER-2 ECD co
PCR primer MTL(P)
Human consensus se
Maize metallothion
Reverse PCR primer
Primer Vbeta5 for
Probe for human PG
Human silent SNP c
Human silent SNP c
Human silent SNP c
Human silent SNP c
Oligonucleotide 6
Nucleotide sequenc
Nucleotide sequenc
Nucleotide sequenc
Oligonucleotide 4
Human ICAM-1 antis
Human ICAM-1 antis
Mouse EphA4 gene p
HCV-1a E2 forward
Human ICAM-1 DNA f
Prostate specific
Human kinase codin
Membrane transport
Membrane transport
Human kinase codin
Human CTFP hairpin
Human KDR VEGF rec
Nucleotide sequenc
cDNA encoding a co
H. pylori immunogl
H. pylori immunogl
H. pylori derived

PT of antisense nucleic acid for treating or diagnosing cancer,
 PT restenosis, osteoarthritis, neurological and intestinal abnormalities
 PT and pre-eclampsia -
 XX
 PS Claim 4; Column 9; 18pp; English.
 XX
 CC The invention provides a method for reducing radiation or drug resistance
 CC of a cell, in vitro, which does not overexpress HER-2 or raf-1 genes.
 CC The method comprises introducing to the cell an antisense nucleic acid
 CC comprising a segment complementary to HER-2 or raf-1. The method is
 CC useful for increasing drug and radiation sensitivity in a cell.
 CC particularly in the treatment of radioresistant tumours. The antisense
 CC nucleic acids are useful for treating or diagnosing cancer, restenosis,
 CC osteoarthritis, neurological and intestinal abnormalities and
 CC pre-eclampsia. The present sequence represents a phosphorothioated
 CC antisense oligo (ASO) directed against HER-2 gene.
 XX
 SQ Sequence 15 BP; 2 A; 5 C; 3 G; 5 T; 0 other;
 Query Match 100.0%; Score 15; DB 21; Length 15;
 Best Local Similarity 100.0%; Pred. No. 55;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 tccatggtgctcact 15
 Db 1 tccatggtgctcact 15
 RESULT 2
 AAF98894
 ID AAF98894 standard; DNA; 19 BP.
 AC AAF98894;
 XX
 DT 12-JUN-2001 (first entry)
 XX
 DE Immunostimulatory nucleic acid #10.
 XX
 KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
 KW immunostimulatory; tumour; viral infection; bacterial infection;
 KW fungal infection; parasitic infection; cancer; asthma;
 KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
 XX
 OS Synthetic.
 OS
 PN WO200122972-A2.
 XX
 PD 05-APR-2001.
 XX
 PF 25-SEP-2000; 2000WO-US26383.
 XX
 PR 25-SEP-1999; 99US-0156113.
 PR 27-SEP-1999; 99US-0156135.
 PR 23-AUG-2000; 2000US-0227436.
 XX
 XX (IOWA) UNIV IOWA RES FOUND.
 PA (COLE-) COLEY PHARM GMBH.
 XX
 PI Krieg AM, Schetter C, Vollmer J;
 XX
 DR WPI; 2001-273485/28.
 XX
 XX Vaccinating against tumors, infectious diseases, allergies and asthma
 PT using immunostimulatory Py-rich and TG nucleic acids -
 XX
 PS Disclosure; Page 38; 338pp; English.
 XX
 CC The present invention relates to a method for stimulating an immune
 CC response. The method comprises administering an immunostimulatory nucleic
 CC acid to a non-rodent subject in sufficient quantity to stimulate an
 CC immune response. The present sequence is one such immunostimulatory
 CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich

CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
 CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
 CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
 CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
 CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
 CC also useful for preventing cancer, asthma, infectious diseases, allergy or
 CC immune deficiency. The present sequence can also be used to redirect a
 CC Th2 to a Th1 immune response and to activate immune cells.
 CC Note: the present sequence may have a phosphorothioate backbone.
 XX
 SQ Sequence 19 BP; 3 A; 6 C; 5 G; 5 T; 0 other;
 Query Match 100.0%; Score 15; DB 22; Length 19;
 Best Local Similarity 100.0%; Pred. No. 57;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 tccatggtgctcact 15
 Db 4 tccatggtgctcact 18
 RESULT 3
 AAQ52043/C
 ID AAQ52043 standard; RNA; 24 BP.
 XX
 AC AAQ52043;
 XX
 DT 26-MAY-1994 (first entry)
 XX
 DE Breast cancer specific mRNA ribozyme cleavable nucleotide (159).
 XX
 KW Multiple drug resistance; mdr-1; ribozyme; membrane protein; liver;
 KW resistance; chemotherapeutic agent; colchicine; doxorubicin; colon;
 KW actinomycin D; vinblastine; small intestine; kidney; adrenal gland;
 KW adenocarcinoma; bowel; transformed phenotype; promyelocytic leukemia;
 KW human; chronic myelogenous leukemia; CML; follicular lymphoma;
 KW B-cell acute lymphocytic leukemia; breast cancer; colon carcinoma;
 KW neuroblastoma; lung cancer; genetic drift; mutation; hammerhead motif;
 KW hairpin; hepatitis delta virus; group I intron; RNaseP; ss.
 XX
 OS Homo sapiens.
 OS
 PN WO9323057-A.
 XX
 PD 25-NOV-1993.
 XX
 PF 13-MAY-1993; 93WO-US04573.
 XX
 PR 14-MAY-1992; 92US-0882822.
 PR 14-MAY-1992; 92US-0882885.
 PR 26-AUG-1992; 92US-0936110.
 PR 26-AUG-1992; 92US-0936421.
 PR 26-AUG-1992; 92US-0936422.
 PR 26-AUG-1992; 92US-0936531.
 PR 26-AUG-1992; 92US-0936532.
 PR 07-DEC-1992; 92US-0987131.
 PR 19-JAN-1993; 93US-0006122.
 PR 19-JAN-1993; 93US-0008910.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Draper KG, Thompson JD;
 XX
 DR WPI; 1993-386203/48.
 XX
 PT New enzymatic RNA molecules (ribozymes) - which cleave mRNA
 PT associated with tumours or mRNA expressed from gene encoding
 PT multiple drug resistance
 XX
 PS Claim 3; Fig 8; 69pp; English.
 XX
 CC The sequences given in AAQ51825-2266 represent areas of mRNAs which are

CC associated with development or maintenance of chronic myelogenous
CC leukemia (CML), promyelocytic leukemia, Burkitt's lymphoma, or
CC acute lymphocytic leukemia, follicular lymphoma, B-cell acute
CC lymphocytic leukemia, breast cancer, colon carcinoma, neuroblastoma
CC and lung cancer. The full length mRNAs containing these target
CC sequences, encode aberrant cellular proteins which are able to control
CC cellular proliferation and are directly linked to a leukemic
CC phenotype. These target sequences are identified by the ribozyme of
CC the invention. The ribozymes is formed in a hammerhead motif, but may
CC also be formed in the motif of a hairpin, hepatitis delta virus, group
CC I intron or RNaseP-like RNA. These ribozymes may be used to inhibit
CC the development or expression of a transformed phenotype in man and
CC other animals by modulating expression of the corresponding gene.
CC Cleavage of target mRNAs expressed in pre-neoplastic and transformed
CC cells elicits inhibition of the transformed state. Multiple drug
CC resistance (mdr-1) mRNA specific ribozymes remove the mechanism of
CC drug resistance used by transformed cells and thus enhances drug
CC therapies for tumours. The ribozymes may also be used to study
CC genetic drift and mutations within cells.
XX
SQ Sequence 24 BP; 6 A; 7 C; 8 G; 3 U; 0 other;

Query Match 100.0%; Score 15; DB 14; Length 24;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 tccatggtgctact 15
DB 21 TCCATGCTGCTACT 7

RESULT 4
AAX80767/C
ID AAX80767 standard; DNA; 70 BP.
XX
AC AAX80767;
XX
DT 26-OCT-1999 (first entry)
XX
DE Promoter region of HER-2 DNA target sequence.
XX
HER-2; c-erb-B2; target sequence; antisense molecule; HERMYC1; HERMYC2;
KW HERMYC1R; HERMYC2R; breast cancer; c-myc; promoter region; HER 5';
KW topological linkage; padlock DNA; malignancy; metastasis; tumour;
KW transcription factors; gene therapy; cultured cell; amplification;
KW antisense technology; therapeutic modulation; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT misc_binding 6..20
FT /*tag= a
FT /bound_moiety= "HERMYC1 or HERMYC1R antisense molecule"
FT /note= "Forms a duplex in the presence of HERMYC1 in
FT AAX80768 or HERMYC1R antisense molecule in AAX80770"
FT misc_binding 37..50
FT /*tag= b
FT /bound_moiety= "HERMYC2 or HERMYC2R antisense molecule"
FT /note= "Forms a duplex in the presence of HERMYC2 in
FT AAX80769 or HERMYC2R antisense molecule in AAX80771".
XX
PN WO9909045-A1.
XX
PD 25-FEB-1999.
XX
XX
XX 20-AUG-1998; 98WO-US17268.
XX
XX 20-AUG-1997; 97US-0056742.
XX
XX (SOMA-) SOMAGENICS INC.
XX
XX Johnston BH, Kazakov SA, Kisich KO;

XX WPI; 1999-228889/19.
XX
XX A new antisense molecule which topologically links to target mRNA
PT
XX Example 5; Fig 8; 134pp; English.
PS
XX The present sequence is the 5' promoter region of HER-2 oncogene, that
CC undergoes genetic alterations along with c-myc gene and is associated
CC with aggressive breast cancer and poor prognosis. Overexpression of
CC HER-2 gene has been shown to enhance malignancy and metastasis.
CC Repression of HER-2 in mouse tumours leads to suppression of tumour
CC growth and longer life of the animal. This can be done by using padlock
CC DNAs, HERMYC1, HERMYC1R, HERMYC2 and HERMYC2R, that target a G rich
CC sequence in the promoter region. It inhibits binding of transcription
CC factors. This sequence can be used as a target sequence in antisense
CC technology for therapeutic modulation of gene expression in cultured
CC cells and whole animals, for gene function analysis and target
CC validation for gene therapy and for the detection and amplification of
CC nucleic acids.
XX
SQ Sequence 70 BP; 6 A; 25 C; 26 G; 13 T; 0 other;

Query Match 100.0%; Score 15; DB 20; Length 70;
Best Local Similarity 100.0%; Pred. No. 65;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 tccatggtgctact 15
DB 28 TCCATGCTGCTACT 14

RESULT 5
AAX40434
ID AAX40434 standard; DNA; 15 BP.
XX
XX AAX40434;
AC
XX 28-SEP-1998 (first entry)
DT
XX
DE US-1 antisense oligonucleotide used to down regulate ERBB2 oncogene.
XX
KW Antisense oligonucleotide; down regulate; erbB-2; oncogene;
KW tyrosine kinase; breast cancer; radioisotope; hybridisation; probe;
KW US-1; US-3; US-4; US-5; UT-1; US-D; SC-3; TRACER; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX WO9820168-A1.
PN
XX 14-MAY-1998.
PD
XX
XX 03-NOV-1997; 97WO-US20910.
PF
XX
XX 04-NOV-1996; 96US-0740821.
PR
XX
XX (UYDU-) UNIV DUKE.
PA
XX
XX Inglehart JD, Marks JR, Vaughn JP;
PI
XX
XX WPI; 1998-286977/25.
DR
XX
XX Antisense oligonucleotides that down regulate the erbB-2 oncogene -
PT useful to inhibit ERBB2 tyrosine kinase receptor expression in
PT cancer cells to treat epithelial cell, breast, ovarian, lung or
PT colon cancer
XX
XX Example 6; Page 15; 31pp; English.
PS
XX The antisense oligonucleotides AAX40432-V40439 were used to down
CC regulate the erbB-2 oncogene. This oncogene codes for a 185KD tyrosine

CC kinase linked transmembrane protein which in 30-50% of primary breast
 CC cancers is overexpressed. The oligonucleotides are able to inhibit the
 CC overexpression of ErbB2 tyrosine kinase receptor in a cell, which can be
 CC done by targeting the antisense oligonucleotides to the erbB-2 oncogene.
 CC By labelling the oligonucleotides with, for example, a radioisotope,
 CC they can also be used as hybridisation probes to detect the ERBB2 gene.
 CC The oligonucleotides were designated the following names, followed by
 CC the location in the erbB-2 gene that they target: US-1 (166-180); US-3
 CC (160-174); US-4 (173-187); US-5 (178-192); UT-1 (151-165); US-D
 CC (US-1 scrambled control); SC-3 (US-3 scrambled control); TRACER
 CC (fluoresceinated tracer). It was found that all of the oligonucleotides
 CC (apart from the controls) inhibited the erbB-2 protein, however with
 CC varying degrees of effectiveness. US-3 and UT-1 were identified as
 CC being the most efficient oligonucleotides at inhibiting erbB-2. The
 CC oligonucleotides are useful in vivo to treat cancer (especially
 CC epithelial cell, breast, ovarian, lung or colon cancer) in a human or
 CC other animal, especially when the cancer is characterised by cells that
 CC overexpress the ERBB2 tyrosine kinase receptor.
 CC
 SQ Sequence 15 BP; 2 A; 6 C; 3 G; 4 T; 0 other;

Query Match 93.3%; Score 14; DB 19; Length 15;
 Best Local Similarity 100.0%; Pred. No. 2e+02;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 tccatggtgctcac 14
 Db 2 tccatggtgctcac 15
 |||||

RESULT 6
 AAI75566
 ID AAI75566 standard; DNA; 51 BP.
 AC AAI75566;
 XX
 XX
 XX
 DT 09-NOV-2001 (first entry)
 XX
 XX Human silent SNP containing nucleic acid SEQ:2507.
 DE
 DE Human; single nucleotide polymorphism; SNP; genome; gene therapy;
 KW protein therapy; vaccine; probe; diagnostic assay; detection;
 KW quantitation; restorative therapy; polymorphic; ds.
 XX
 XX Homo sapiens.
 OS
 XX WO200140521-A2.
 PN
 XX
 XX 07-JUN-2001.
 PD
 XX 30-NOV-2000; 2000WO-US32758.
 PF
 XX 30-NOV-1999; 99US-0168138.
 PR
 XX 29-NOV-2000; 2000US-0726173.
 XX
 XX (CURA-) CURAGEN CORP.
 PA
 XX Shimkets RA, Leach M;
 PI
 XX WPI; 2001-356160/37.
 DR
 XX Polymorphic nucleic acid sequences, useful in genetic testing and
 PT therapy -
 PT
 XX Claim 1; Page 818; 2653pp; English.
 PS
 XX AAI73060 to AAI79867 represent isolated human polymorphic polynucleotide
 CC sequences (1), which contain single nucleotide polymorphisms (SNPs).
 CC AAM53114 to AAM53329 represent peptides related to human polymorphic
 CC polynucleotide sequences. The sequences can be used in gene and protein
 CC therapy, and in vaccine production. (1) and the polypeptides encoded by
 CC them may be used in the prevention, diagnosis and treatment of diseases

CC associated with inappropriate expression of polymorphic polypeptides.
 CC For example, (1) may be used to treat disorders by rectifying mutations
 CC or deletions in a patient's genome that affect the activity of
 CC polypeptides by expressing inactive proteins or to supplement the
 CC patients own production of polypeptide. Additionally, (1) and its
 CC complementary sequences may also be used as DNA probes in diagnostic
 CC assays to detect and quantitate the presence of similar nucleic acids
 CC in samples, and therefore which patients may be in need of restorative
 CC therapy. The polypeptides encoded by (1) may be used as antigens in the
 CC production of antibodies specific for polymorphic polypeptides. The
 CC antibodies may also be used to down regulate expression and activity.
 CC The antibodies may also be used as diagnostic agents for detecting the
 CC presence of polymorphic polypeptides in samples.
 XX
 SQ Sequence 51 BP; 7 A; 14 C; 15 G; 15 T; 0 other;

Query Match 93.3%; Score 14; DB 22; Length 51;
 Best Local Similarity 100.0%; Pred. No. 2.2e+02;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 ccatggtgctcac 15
 Db 17 ccatggtgctcac 30
 |||||

RESULT 7
 AAV22685/c
 ID AAV22685 standard; DNA; 24 BP.
 XX
 AC AAV22685;
 XX
 XX 20-JUL-1998 (first entry)
 DT
 XX
 DE PCR primer HN40 used to amplify Erbb-2.
 XX
 XX Erbb-2 protein; vaccine; T-cell damage; activation; T-cell; treatment;
 KW prevention; viral disease; cancer; autoimmune disorder; PCR primer; ss.
 KW
 XX Synthetic.
 OS
 XX WO9809650-A1.
 PN
 XX 12-MAR-1998.
 PD
 XX 05-SEP-1997; 97WO-JP03123.
 PF
 XX 06-SEP-1996; 96JP-0236937.
 PR
 XX (MITU) MITSUBISHI CHEM CORP.
 PA
 XX Nakamura H, Shiku H, Sunamoto J;
 PI
 XX WPI; 1998-193326/17.
 DR
 XX Vaccine preparation comprises antigen and hydrophobic polysaccharide
 PT - e.g. mannan containing sterol groups for treating, e.g. cancer
 PT
 XX Example 1; Page 9; 27pp; English.
 PS
 XX PCR primers AAV22685-86 are used to amplify DNA encoding Erbb-2
 CC proteins. The specification describes a vaccine preparation that
 CC comprises an antigen and, optionally, a hydrophobic polysaccharide (HPS)
 CC optionally as a composite. The antigen is a protein, such as Erbb-2 class
 CC 1-9 proteins, which initiate T-cell damage. The vaccine activates T-cells
 CC and is useful for the treatment and prevention of viral diseases, cancer
 CC and autoimmune disorders.
 CC
 SQ Sequence 24 BP; 6 A; 6 C; 7 G; 5 T; 0 other;

Query Match 89.3%; Score 13.4; DB 19; Length 24;
 Best Local Similarity 93.3%; Pred. No. 4.5e+02;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 tccatggtgctcact 15
|||||
Db 21 TCCATGGTGATCACT 7

RESULT 8

AAS09199/c
ID AAS09199 standard; DNA; 29 BP.

XX
XX
AC AAS09199;

XX
XX
DT 07-NOV-2001 (first entry)

XX
XX
DE PCR primer #1 used to amplify cDNA encoding murine CCR7.

XX
KW Cell fusion assay; fluorescence resonance energy transfer; FRET;
KW beta-lactamase; inhibition of cell fusion; CD4; cytokine receptor;
KW viral disease; HIV-1 infection; mouse; murine; CCR7; Th1 cell;
KW PCR primer; ss.

XX
OS Mus sp.

XX
XX
PN WO200160995-A1.

XX
XX
PD 23-AUG-2001.

XX
XX
PF 13-FEB-2001; 2001WO-US04677.

XX
XX
PR 17-FEB-2000; 2000US-0183309.

XX
XX
PA (MERI) MERCK & CO INC.

XX
PI Sullivan KA, Benincasa D, Cascieri MA, Mitnaul LJ, Shiao L;
PI Tota MR;

XX
XX
DR WPI; 2001-536569/59.

XX
PT Determining the amount of fusion that occur between two cells comprises
XX measurement of fluorescence energy transfer -

XX
PS Disclosure; Page 14; 59pp; English.

XX
CC The present invention relates to a method for determining the amount
CC of fusion that occurs between two cells, one of which contains the
CC enzyme beta-lactamase and the other of which contains a fluorescent
CC substrate of beta-lactamase. The method comprises the measurement of
CC fluorescence resonance energy transfer (FRET). The invention also
CC provides methods of identifying inhibitors of the fusion of two
CC types of cells, particularly when fusion is mediated by the
CC interaction of a viral protein and target cellular proteins e.g. CD4
CC and cytokine receptors. The methods are useful for identifying
CC substances that are useful for the treatment of viral diseases,
CC particularly for the identification of inhibitors of HIV-1 infection.
CC The present sequence for PCR primer #1 is used with PCR primer #2
CC (AAS09200) to amplify cDNA encoding CCR7 from murine Th1 cells.

XX
SQ Sequence 29 BP; 9 A; 8 C; 10 G; 2 T; 0 other;

Query Match 89.3%; Score 13.4; DB 22; Length 29;
Best Local Similarity 93.3%; Pred. No. 4.6e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 tccatggtgctcact 15
|||||
Db 23 TCCATGGTGCTCTCT 9

RESULT 9

AAQ92762
ID AAQ92762 standard; DNA; 14 BP.

XX
AC AAQ92762;

XX
XX
DT 13-FEB-1996 (first entry)

XX
XX
DE c-erbB-2 antisense nucleic acid #105.

XX
KW Antisense nucleic acid; c-erbB-2; inhibition; fibroblast; neoplasm;
KW p185-erbB-2 protein tyrosine kinase; tumour; breast cancer; detection;
KW immune disease; angiogenesis; ss.

XX
OS Synthetic.

XX
XX
PN WO9517507-A1.

XX
XX
PD 29-JUN-1995.

XX
XX
PF 09-DEC-1994; 94WO-EP04094.

XX
XX
PR 23-DEC-1993; 93EP-0120710.

XX
XX
PA (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.

XX
PI Brysch W, Schlingensiefen G, Schlingensiefen K, Schlingensiefen R;
XX WPI; 1995-240669/31.

XX
PT New anti-sense nucleic acid against C-erbB-2 - for treating or
XX preventing neoplasms, immune disease and angiogenesis, also for
XX diagnosis

XX
PS Claim 1; Page 48; 55pp; English.

XX
CC The sequences given in AAQ92658-762 are antisense nucleic acids which
XX hybridise with part of the mRNA and/or DNA encoding c-erbB-2. These
XX antisense nucleic acids are able to inhibit the expression of the
XX p185-erbB-2 protein tyrosine kinase activity and cell growth in a
XX number of tumour cells including breast cancer cells. Untransformed
XX normal fibroblasts are not growth inhibited by anti-c-erbB-2
XX antisense compounds suggesting that p185-erbB-2 plays a pathogenic
XX role in the growth of the above mentioned tumours. These antisense
XX oligonucleotides may be used in the prevention and treatment of
XX neoplasms, immune diseases and/or diseases involving pathological
XX angiogenesis when associated with c-erbB-2 expression. They may also
XX be used to detect expression of the relevant genes.

XX
SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 other;

Query Match 86.7%; Score 13; DB 16; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.1e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 catggtgctcact 15
|||||
Db 1 catggtgctcact 13

RESULT 10

AAV48736
ID AAV48736 standard; DNA; 16 BP.

XX
XX
AC AAV48736;

XX
XX
DT 15-OCT-1998 (first entry)

XX
XX
DE ErbB-2 gene antisense oligonucleotide ErbB-2-28.

XX
KW ErbB-2; antisense oligonucleotide; modulate; gene expression; ss.

XX
OS Synthetic.

XX
OS Homo sapiens.

PN EP856579-A1.

XX

PD 05-AUG-1998.

XX

PF 31-JAN-1997; 97EP-0101531.

XX

PR 31-JAN-1997; 97EP-0101531.

XX

PA (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.

XX

PI Brysch W, Schllingensiepen K;

XX

PT WPI; 1998-400910/35.

XX

PT Preparation of antisense oligo:nucleotide(s) which lack long runs of
PT consecutive guanosine or inosine - and have specific ratio of
PT residues able to form two or three hydrogen bonds, have greater
PT activity and reduced toxicity, used therapeutically or to modulate
PT growth of cells in culture

XX

PS Claim 10; Fig 6a; 286pp; English.

XX

CC AAV48709-886 represent antisense oligonucleotides directed against the
CC ErbB-2 gene. Of these, only oligonucleotides AAV48709-91 resulted
CC in significant reduction in ErbB-2 protein expression, while
CC oligonucleotides AAV48792-886 had little effect. The oligonucleotides
CC exemplify the invention. The specification describes oligonucleotides
CC that contain 8-30 nucleotides, which contain at most 8 nucleotides that
CC can each form three hydrogen bonds to cytosine; do not contain four
CC consecutive nucleotides able to form three H-bonds each to four
CC consecutive cytosines; do not contain two sequences of three consecutive
CC nucleotides each able to form three H-bonds to three consecutive
CC cytosines, and the ratio between residues able to form two H-bonds each
CC (2R) or three such bonds (3R) is given by $2R/3R = 0.33-0.72$. The
CC oligonucleotides are used to modulate expression of genes, particularly
CC the genes for p53, ErbB-2, junB, jund, TGF-beta 1 or beta 2 to control
CC proliferation of primary cell cultures (e.g. bone marrow stem, liver or
CC kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The
CC oligonucleotides can also be used to analyse function of proteins (by
CC altering their expression or activity) and therapeutically, e.g. in
CC cases of cancer or (targeting TGF) for stimulating the immune system.

XX

SQ Sequence 16 BP; 2 A; 5 C; 5 G; 4 T; 0 other;

Query Match 86.7%; Score 13; DB 19; Length 16;

Best Local Similarity 100.0%; Pred. No. 7.1e+02;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 catggtgctcact 15

|||||

Db 1 catggtgctcact 13

RESULT 11

AAAS3776/c

ID AAA53776 standard; DNA; 19 BP.

XX

AC AAA53776;

XX

DT 04-DEC-2000 (first entry)

XX

DE Forward primer for HER-2 extracellular domain cDNA.

XX

KW HER-2; erbB-2; oncogene; receptor-like tyrosine kinase; insertion;
KW extracellular domain IIIa; antagonist; intron 8; C-terminal extension;
KW truncated HER-2; p68; dimerization inhibitor; cytostatic; primer; ss.

OS Homo sapiens.

XX

PN WO200044403-A1.

XX

PD 03-AUG-2000.

XX

XX

PF 20-JAN-2000; 2000WO-US01484.

XX

PR 20-JAN-1999; 99US-0234208.

XX

PA (UYOR-) UNIV OREGON HEALTH SCI.

XX

PI Doherty JK, Clinton GM, Adelman JP;

XX

DR WPI; 2000-499287/44.

XX

PT Using polypeptides and antibodies that bind to the extracellular domain
PT of the receptor-like tyrosine kinase HER-2 to treat solid tumors of the
PT breast, lung, ovaries and colon

XX

PS Example 1; Page 14; 46pp; English.

XX

CC This primer, corresponding to HER-2 cDNA nucleotides 142-161, was used
CC to amplify the HER-2 extracellular domain. The reverse primers used are
CC shown in AAAS3777 and AAAS3778.

XX

CC HER-2/neu (erbB-2) oncogene encodes a receptor-like tyrosine kinase. The
CC extracellular domain of p185-HER-2 is proteolytically shed from breast
CC carcinoma cells in culture and is found in serum of some cancer patients
CC and may be a serum marker of metastatic breast cancer. An alternative
CC HER-2 mRNA of 4.8 kb with a 274 bp insert (intron 8) has been
CC identified. The retained intron is in-frame and encodes a 79 amino acid
CC extension designated ECDIIIa (the present sequence), which is inserted at
CC residue 340 of p185-HER-2. The alternative mRNA predicts a truncated
CC HER-2 protein (approximately 68 kDa) that lacks the transmembrane and
CC intracellular domains (see AAY97240). p68HER-2 specifically binds to
CC p185-HER-2 without activating HER-2. It could therefore block
CC dimerization of p185-HER-2. The p68HER-2 polypeptide binds to a site on
CC the ECD of HER-2 that is different from the site of binding for
CC Herceptin (RTM) (a marketed humanized monoclonal antibody that is used
CC for the treatment of cancer and binds to the ECD of HER-2). The methods,
CC compositions, polypeptides and antibodies are used to treat solid
CC tumours such as breast cancer, small cell lung carcinoma, ovarian cancer
CC and/or colon cancer, especially where over-expression of HER-2 is
CC indicated.

XX

SQ Sequence 19 BP; 4 A; 5 C; 7 G; 3 T; 0 other;

Query Match 86.7%; Score 13; DB 21; Length 19;

Best Local Similarity 100.0%; Pred. No. 7.3e+02;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 tccatggtgtctca 13

|||||

Db 13 TCCATGGTGTCTCA 1

RESULT 12

AAAD15845/c

ID AAD15845 standard; DNA; 19 BP.

XX

AC AAD15845;

XX

DT 15-NOV-2001 (first entry)

XX

DE Human HER-2 ECD coding sequence amplifying forward PCR primer #1.

XX

KW HER-2; herstatin; antagonist; extracellular domain; ECD; Herceptin;
KW solid tumour; cancer; polymorphism; cytostatic; gene therapy; PCR primer;
KW ss.

XX

OS Homo sapiens.

XX

PN WO200161356-A1.

XX

PD 23-AUG-2001.

XX

PF 16-FEB-2001; 2001WO-US05327.

```

XX PR 16-FEB-2000; 2000US-0506079.
XX PA (UYOR-) UNIV OREGON HEALTH SCI.
XX PI Clinton G, Henner WD, Evans A;
XX DR WPI; 2001-529934/58.
XX PT New polypeptide, which binds to the extracellular domain of HER-2 for
XX PT the treatment of hard tumors -
XX PS Example 1; Page 22; 61pp; English.
XX XX
XX The invention relates to novel HER-2 (herstatin-2) antagonist
XX particularly a polypeptide that binds to the extracellular domain (ECD)
XX of HER-2 at a site that is different from the binding site of humanised
XX antibody, Herceptin, at an affinity of at least 10-8. The present
XX invention is based upon the initial discovery of an alternative HER-2
XX mRNA transcript with 274 bp insert of intron 8. The translation product
XX of the alternative transcript is a truncated HER-2 protein designated
XX p68HER-2 which lacks the transmembrane and intracellular domains of
XX p185HER-2 but contains ECD 1, II of the p185HER-2 and the novel ECDIIIA.
XX The ECDIIIA-containing polypeptides bind tightly to, and thus antagonise
XX the HER-2 receptor. The peptides, which bind to an HER-2 ECD, and the
XX nucleic acids encoding these are useful to treat, diagnose and identify
XX solid tumours. The present sequence is a PCR primer used for amplifying
XX human HER2 ECD coding sequence.
XX SQ Sequence 19 BP; 4 A; 5 C; 7 G; 3 T; 0 other;

Query Match 86.7%; Score 13; DB 22; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.3e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 tccatggtgctca 13
Db 13 TCCATGGTGCTCA 1

RESULT 13
AAV84090
ID AAV84090 standard; DNA; 20 BP.
AC AAV84090;
XX DT 12-MAR-1999 (first entry)
XX DE PCR primer MTL(P) used to amplify the iap, p35 and dad-1 genes.
XX KW Transgenic maize; Agrobacterium induced necrosis inhibition;
XX KW metallothionein-like promoter; iap, p35; dad-1; PCR primer; ss.
XX OS Synthetic.
XX WO9854961-A2.
XX PN 10-DEC-1998.
XX PD
XX PF 29-MAY-1998; 98WO-EF03215.
XX PR 02-JUN-1997; 97US-0867869.
XX PA (NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.
XX PI Hansen G;
XX DR WPI; 1999-059863/05.
XX PT Transforming plant cells using Agrobacterium - in conditions that
XX PT inhibit Agrobacterium-induced necrosis
XX XX

```

```

PS Example 8; Page 25; 47pp; English.
XX XX
XX PCR primers AAV84090-93 were used for the amplification and detection
XX of iap, p35 and dad-1 genes in transgenic maize callus, which was
XX transformed with these genes using the method of the invention. The
XX genes were cloned under the control of a metallothionein-like
XX promoter (MLP). PCR primer AAV84090 hybridises promoter sequences, and
XX is used in combination with each of the other primers in separate
XX reactions. The specification describes a new method for transforming a
XX plant cell with a gene of interest. The method comprises exposing the
XX cell to Agrobacterium carrying that gene, under conditions which inhibit
XX Agrobacterium induced necrosis (AIN). The method is used to transform
XX plants with a gene of interest.
XX SQ Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 other;

Query Match 86.7%; Score 13; DB 20; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.3e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 tccatggtgctca 13
Db 6 tccatggtgctca 18

RESULT 14
AAS00677/c
ID AAS00677 standard; DNA; 20 BP.
XX AC AAS00677;
XX DT 07-SEP-2001 (first entry)
XX DE Human consensus sequence 65677221-3-frag DNA probe.
XX KW Wnt signalling pathway; FCTR; cytokine-like polypeptide; human; cancer;
XX KW immune system disorder; tissue proliferation; neurological disorder; ss;
XX KW septic shock; arthritis; Crohn's disease; anaphylaxis; haemophilia; EST;
XX KW stroke; inflammatory bowel disease; depressive disorder; mammary tumour;
XX KW cognitive disorder; psoriasis; clone 791c.7; expressed sequence tag;
XX KW consensus sequence 65677221-3-frag; probe.
XX OS Homo sapiens.
XX PN WO200136644-A2.
XX PD 25-MAY-2001.
XX PF 17-NOV-2000; 2000WO-US31629.
XX PR 18-NOV-1999; 99US-0166177.
XX PR 16-NOV-2000; 2000US-0166177.
XX PA (CURA-) CURAGEN CORP.
XX PI Rastelli L, Lewin D, Taillon B, Andrew DP;
XX DR WPI; 2001-329224/34.
XX XX
XX S100 cytokine-like polypeptide member of the Wnt signalling pathway
XX designated (FCTR) and the nucleic acid that encodes it, useful for
XX preventing, diagnosing and treating e.g. cancers and inflammation -
XX PS Example 3; Page 86; 115pp; English.
XX XX
XX The sequence represents a DNA probe for expression analysis of human
XX consensus sequence 65677221-3-frag DNA which encompasses and extends the
XX human expressed sequence tag (EST) AA315020. AA315020 is similar to
XX murine clone 791c.7 DNA which encodes a cytokine-like polypeptide member
XX of the Wnt signalling pathway and is expressed in murine mammary tumours.
XX Cytokine-like polypeptides and their associated polynucleotides are
XX termed FCTR polypeptides and FCTR polynucleotides. An alteration in the

```

CC amount of FCTR_X protein can result in a pathology related to a
CC dysfunction in the immune system, a tissue proliferation-associated
CC disorder, or a neurological disorder. The sequences of the invention may
CC be used in the prevention, diagnosis and treatment of diseases associated
CC with inappropriate FCTR_X expression, for example, by rectifying mutations
CC or deletions in a patient's genome that affect the activity of FCTR_X by
CC expressing inactive proteins, or by supplementing the patient's own
CC production of FCTR_X. DNA molecules may be used to produce the FCTR_X
CC protein by transforming a host cell and culturing the cell to express the
CC protein. Examples of disorders associated with abnormal FCTR_X protein
CC expression include septic shock, arthritis, Crohn's disease, anaphylaxis,
CC stroke, haemophilia, cancer, inflammatory bowel disease, depressive
CC disorders, cognitive disorders, and psoriasis.
XX
XX Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 other;

Query Match 86.7%; Score 13; DB 22; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.3e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 3 catggtgctcact 15
Db 20 CATGTGCTCACT 8
|||||

RESULT 15
AAF26607
ID AAF26607 standard; DNA; 20 BP.
AC
XX AAF26607;
XX
DT 27-MAR-2001 (first entry)
XX
DE Maize metallothionein-like gene promoter (MTL) PCR primer SEQ ID NO:3.
XX
XX Maize: Agrobacterium; transformation; plant; Gramineae; MTL;
KW metallothionein-like gene promoter; Agrobacterium induced necrosis;
KW inhibition; fertile; gramineaceous plant; PCR primer; ss.
XX
XX Zea mays.
OS
XX US6162965-A.
PN
XX 19-DEC-2000.
PD
XX 02-JUN-1998; 98US-0089111.
PF
XX 02-JUN-1997; 97US-0098564.
PR
XX (NOVS) NOVARTIS AG.
PA
XX Hansen G;
PI
XX WPI; 2001-090412/10.
DR
XX

PT Agrobacterium transformation of gramineaceous plants involves utilizing
PT Agrobacterium-induced necrosis inhibiting agents such as AIN inhibiting
PT nucleotide sequences or chemical compounds, or by heat shock treatment
PT
XX
XX Example 8; Column 18; 19pp; English.
PS
XX The present invention describes a method (M1) for transforming a
XX gramineaceous plant cell or tissue with a gene construct. The method
XX involves exposing the plant cell to Agrobacterium under conditions which
XX inhibit Agrobacterium induced necrosis (AIN) by the use of AIN inhibiting
XX agents such as chemical compounds, AIN inhibiting nucleotide sequences or
XX by heat shock treatment. Also described are: (1) a transgenic plant,
XX plant tissue or cell in whose genome a stably integrated nucleotide
XX sequence of heterologous origin which comprises a coding sequence of p35,
XX iap or dad-1 gene is present; and (2) a gramineaceous plant cell or tissue
XX culture medium comprising an ethylene inhibitor other than silver nitrate

CC or an ethylene synthesis inhibitor and an Agrobacterium comprising a
CC plasmid which has a gene construct. (M1) is useful for producing a
CC fertile transgenic plant, preferably a gramineaceous plant, e.g. maize
CC comprising a gene construct. The method involves transforming the plant
CC cell or tissue by exposing the plant cell or tissue to Agrobacterium
CC under conditions which inhibit AIN such as heat shocking, AIN inhibiting
CC nucleotide sequences stably integrated or transiently expressed or by use
CC of chemical inhibitors, and then regenerating the transformed plant cell
CC or tissue to produce the fertile transgenic plant. The fertile transgenic
CC maize plants comprise a genome having a stably integrated nucleotide
CC sequence of heterologous origin comprising a coding sequence of p35, iap
CC or dad-1 gene. The coding sequences preferably comprise maize preferred
CC codons. The present sequence represents a PCR primer which is used in an
XX example from the present invention.

SQ Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 other;

Query Match 86.7%; Score 13; DB 22; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.3e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 tccatggtgctca 13
Db 6 tccatggtgctca 18
|||||

Search completed: July 21, 2002, 03:56:31
Job time: 4300 sec

GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: July 20, 2002, 22:56:25 ; Search time 43.28 Seconds
(without alignments)
85.132 Million cell updates/sec

Title: US-09-716-320-3
Perfect score: 15
Sequence: 1 tccatggtgctcact 15

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 383533 seqs, 122816752 residues

Total number of hits satisfying chosen parameters: 613726

Minimum DB seq length: 0
Maximum DB seq length: 100

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA.*
1: /cgn2.6/ptodata/2/ina/5A_COMB.seq.*
2: /cgn2.6/ptodata/2/ina/5B_COMB.seq.*
3: /cgn2.6/ptodata/2/ina/6A_COMB.seq.*
4: /cgn2.6/ptodata/2/ina/6B_COMB.seq.*
5: /cgn2.6/ptodata/2/ina/PCTUS_COMB.seq.*
6: /cgn2.6/ptodata/2/ina/backfiles1.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	15	100.0	15	3	US-08-991-830A-3
2	15	100.0	24	1	US-08-435-350-4
3	14	93.3	15	2	US-08-740-821-1
4	13	86.7	20	4	US-09-089-111-3
5	13	86.7	26	4	US-08-463-691-18
6	13	86.7	26	4	US-08-255-236-6
7	12.4	82.7	22	2	US-08-229-528-5
8	12.4	82.7	47	4	US-09-338-907-248
9	12.4	82.7	47	4	US-09-218-207-248
10	12	80.0	27	1	US-08-503-730-44
11	12	80.0	53	1	US-08-503-730-29
12	12	80.0	62	1	US-08-503-730-30
13	11.8	78.7	50	2	US-08-832-468-6
14	11.8	78.7	54	1	US-08-363-240A-1077
15	11.8	78.7	54	4	US-08-584-040-4423
16	11.8	78.7	64	1	US-08-290-592E-41
17	11.8	78.7	64	5	PCT-US96-09448-41
18	11.8	78.7	100	1	US-08-655-086-3
19	11.8	78.7	100	3	US-08-441-971-23
20	11.8	78.7	100	4	US-08-221-653-23
21	11.8	78.7	100	4	US-08-442-144A-23
22	11.8	78.7	100	4	US-08-441-970-23
23	11.4	76.0	15	4	US-09-081-648-198
24	11.4	76.0	20	3	US-09-280-799-190
25	11.4	76.0	26	2	US-08-759-581B-16
26	11.4	76.0	26	4	US-09-304-711-16
27	11	73.3	14	5	PCT-US96-05611A-16

C 28	11	73.3	15	4	US-08-268-381-1	Sequence 1, Appl
C 29	11	73.3	20	3	US-09-286-904-77	Sequence 77, Appl
C 30	11	73.3	27	1	US-08-083-948-9	Sequence 9, Appl
C 31	11	73.3	27	1	US-08-393-785-9	Sequence 9, Appl
C 32	11	73.3	27	1	US-08-475-694-9	Sequence 9, Appl
C 33	11	73.3	27	1	US-08-712-057-9	Sequence 9, Appl
C 34	11	73.3	28	3	US-08-441-971-73	Sequence 73, Appl
C 35	11	73.3	28	3	US-08-221-653-73	Sequence 73, Appl
C 36	11	73.3	28	4	US-08-442-144A-73	Sequence 73, Appl
C 37	11	73.3	28	4	US-08-441-970-73	Sequence 73, Appl
C 38	11	73.3	30	4	US-09-243-374-9	Sequence 9, Appl
C 39	11	73.3	30	6	5310667-15	Patent No. 5310667
C 40	11	73.3	33	1	US-08-438-639-21	Sequence 21, Appl
C 41	11	73.3	33	1	US-07-813-338A-21	Sequence 21, Appl
C 42	11	73.3	33	3	US-08-441-971-96	Sequence 96, Appl
C 43	11	73.3	33	4	US-08-221-653-96	Sequence 96, Appl
C 44	11	73.3	33	4	US-08-442-144A-96	Sequence 96, Appl
C 45	11	73.3	33	4	US-08-441-970-96	Sequence 96, Appl

ALIGNMENTS

RESULT 1
US-08-991-830A-3
; Sequence 3, Application US/08991830A
; Patent No. 6027892
; GENERAL INFORMATION:
; APPLICANT: Chang, Esther H.
; TITLE OF INVENTION: Compositions and Methods for Reducing Radiation and Drug R
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sana A. Pratt
; STREET: 10821 Hillbrooke Lane
; CITY: Potomac
; STATE: MARYLAND
; COUNTRY: USA
; ZIP: 20854
; COMPUTER READABLE FORM: disk
; MEDIUM TYPE: Floppy disk
; COMPUTER: Apple Macintosh
; OPERATING SYSTEM: Macintosh 7.5
; SOFTWARE: Microsoft Word 6.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/991,830A
; FILING DATE: 16 December 1997
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/034,160
; FILING DATE: 30 December 1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Sana A. Pratt
; REGISTRATION NUMBER: 39,441
; REFERENCE/DOCKET NUMBER:
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (301) 294-9171
; TELEFAX: (301) 294-7357
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: Nucleic acid
; STRANDEDNESS: Single
; TOPOLOGY: Linear
; MOLECULE TYPE: DNA
US-08-991-830A-3

Query Match 100.0%; Score 15; DB 3; Length 15;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 tccatggtgctcact 15

```
Db 1 TCCATGGTGCTCACT 15
      |||
RESULT 2
US-08-435-350-4/c
; Sequence 4, Application US/08435350
; Patent No. 5593704
; GENERAL INFORMATION:
; APPLICANT: James D. Thompson
; APPLICANT: Kenneth G. Draper
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: TREATMENT OF BREAST CANCER
; NUMBER OF SEQUENCES: 118
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 611 West Sixth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90017
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS (Version 5.0)
; SOFTWARE: Wordperfect (Version 5.1)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/435,350
; FILING DATE: 05-MAY-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/936,531
; FILING DATE: August 26, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 197/245
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 4:
; LENGTH: 24
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-435-350-4

Query Match 100.0%; Score 15; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 tccatggctgctact 15
      |||
Db 21 TCCATGGTGCTCACT 7
      |||
RESULT 3
US-08-740-821-1
; Sequence 1, Application US/08740821
; Patent No. 5910583
; GENERAL INFORMATION:
; APPLICANT: Marks, Jeffrey R.
; APPLICANT: Vaughn, James P.
; APPLICANT: Iglehart, James D.
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDES
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bell, Seltzer, Park & Gibson, P.A.
; STREET: Post Office Drawer 34009
; CITY: Charlotte
```

```
STATE: NO. 5910583th Carolina
COUNTRY: USA
ZIP: 28234
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/740,821
FILING DATE: 04-NOV-1996
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Sidley, Kenneth D.
REGISTRATION NUMBER: 31,665
REFERENCE/DOCKET NUMBER: 5405-134
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-420-2200
TELEFAX: 919-881-3175
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "OLIGONUCLEOTIDE"
US-08-740-821-1

Query Match 93.3%; Score 14; DB 2; Length 15;
Best Local Similarity 100.0%; Pred. No. 47;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 tccatggctgctac 14
      |||
Db 2 TCCATGGTGCTCAC 15
      |||
RESULT 4
US-09-089-111-3
; Sequence 3, Application US/09089111
; Patent No. 6162965
; GENERAL INFORMATION:
; APPLICANT: Hansen, Genevieve
; TITLE OF INVENTION: Plant Transformation Methods
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: No. 6162965artis Corporation
; STREET: 3054 Cornwallis Rd.
; CITY: Research Triangle Park
; STATE: NC
; COUNTRY: USA
; ZIP: 27709
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/089,111
FILING DATE: 02-Jun-1998
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Hoxie, Thomas
REGISTRATION NUMBER: 32,993
REFERENCE/DOCKET NUMBER: CGC1928/R
TELECOMMUNICATION INFORMATION:
TELEPHONE: 919-541-8614
TELEFAX: 919-541-8689
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
```

TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
IMMEDIATE SOURCE:
CLONE: MTL (P)
US-09-089-111-3

Query Match 86.7%; Score 13; DB 4; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 tccatggtgctca 13
Db 6 TCCATGGTGCTCA 18

RESULT 5
US-08-463-691-18
Sequence 18, Application US/08463691
Patent No. 6165712
GENERAL INFORMATION:

APPLICANT: J. Gordon Foulkes et al.
TITLE OF INVENTION: Methods of Transcriptionally
Modulating Expression of Viral Genes and Genes Useful for the
Production of Proteins
TITLE OF INVENTION: Modulating Expression of Proteins
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:

ADDRESSEE: John P. White, Esq.
STREET: 1185 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/463,691
FILING DATE: 5-JUN-1995

CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: White, John P.
REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 26134-G1Z
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-278-0400
TELEFAX: 212-591-0525

TELEX:
INFORMATION FOR SEQ ID NO: 18:
SEQUENCE CHARACTERISTICS:
LENGTH: 26 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-463-691-18

Query Match 86.7%; Score 13; DB 4; Length 26;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 catggtgctact 15
Db 1 CATGGTGCTACT 13

RESULT 6
US-08-255-236-6
Sequence 6, Application US/08255236
Patent No. 6203976
GENERAL INFORMATION:
APPLICANT: Foulkes, J. Gordon
TITLE OF INVENTION: METHODS OF TRANSCRIPTIONALLY MODULATING EXPRESSION OF
VIRAL GENES AND GENES USEFUL FOR PRODUCTION OF PROTEINS
FILE REFERENCE: 26134q1
CURRENT APPLICATION NUMBER: US/08/255,236
CURRENT FILING DATE: 1994-06-07
NUMBER OF SEQ ID NOS: 18
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 6
LENGTH: 26
TYPE: DNA
ORGANISM: Homo sapiens
US-08-255-236-6

Query Match 86.7%; Score 13; DB 4; Length 26;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 catggtgctact 15
Db 1 catggtgctact 13

RESULT 7
US-08-229-528-5/c
Sequence 5, Application US/08229528
Patent No. 5837447
GENERAL INFORMATION:

APPLICANT: GORSKI, Jack
TITLE OF INVENTION: MONITORING AN IMMUNE RESPONSE BY ANALYSIS OF AMPLIFIED IM
NUMBER OF SEQUENCES: 51
CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley & Lardner
STREET: P. O. Box 1497
CITY: Madison
STATE: Wisconsin
COUNTRY: USA
ZIP: 53701-1497

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.44 Mb storage
COMPUTER: IBM PC compatible
OPERATING SYSTEM: MS-DOS 3.3
SOFTWARE: WordPerfect, Version 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/229,528
FILING DATE: 18-APR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/868,569
FILING DATE: 15-APR-1992

ATTORNEY/AGENT INFORMATION:
NAME: Scanlon, William J.
REGISTRATION NUMBER: 30,136
REFERENCE/DOCKET NUMBER: 30383/133
TELECOMMUNICATION INFORMATION:
TELEPHONE: (608) 258-4284
TELEFAX: (608) 258-4258
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 22 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear

MOLECULE TYPE: Other nucleic acid;
DESCRIPTION: Synthetic DNA oligonucleotide
US-08-229-528-5

TELEPHONE: 215-875-8383
TELEFAX: 215-875-8394
INFORMATION FOR SEQ ID NO: 44:
SEQUENCE CHARACTERISTICS:
LENGTH: 27 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-503-730-44

Query Match 80.0%; Score 12; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 5.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 ccatggtgctca 13
Db 16 CCATGGTGCTCA 5

RESULT 11
US-08-503-730-29/C
Sequence 29, Application US/08503730
Patent No. 5780269
GENERAL INFORMATION:
APPLICANT: Inouye, Sumiko
TITLE OF INVENTION: NEW HYBRID MOLECULES
NUMBER OF SEQUENCES: 45
CORRESPONDENCE ADDRESS:
ADDRESSEE: Weiser & Associates
STREET: 230 South Fifteenth Street Suite 500
CITY: Philadelphia
STATE: PA
COUNTRY: USA
ZIP: 19102

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/503,730
FILING DATE: 18-JUL-1995
CLASSIFICATION: 435

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/817,430
FILING DATE: 06-JAN-1992
ATTORNEY/AGENT INFORMATION:
NAME: Weiser, Gerard J.
REGISTRATION NUMBER: 19,763
REFERENCE/DOCKET NUMBER: 377(913).6277P
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-875-8383
TELEFAX: 215-875-8394
INFORMATION FOR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
LENGTH: 53 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: both
US-08-503-730-29

Query Match 80.0%; Score 12; DB 1; Length 53;
Best Local Similarity 100.0%; Pred. No. 5.8e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 ccatggtgctca 13
Db 13 CCATGGTGCTCA 2

RESULT 12
US-08-503-730-30/C
Sequence 30, Application US/08503730
Patent No. 5780269
GENERAL INFORMATION:
APPLICANT: Inouye, Sumiko
TITLE OF INVENTION: NEW HYBRID MOLECULES
NUMBER OF SEQUENCES: 45
CORRESPONDENCE ADDRESS:
ADDRESSEE: Weiser & Associates
STREET: 230 South Fifteenth Street Suite 500
CITY: Philadelphia
STATE: PA
COUNTRY: USA
ZIP: 19102
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/503,730
FILING DATE: 18-JUL-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/817,430
FILING DATE: 06-JAN-1992
ATTORNEY/AGENT INFORMATION:
NAME: Weiser, Gerard J.
REGISTRATION NUMBER: 19,763
REFERENCE/DOCKET NUMBER: 377(913).6277P
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-875-8383
TELEFAX: 215-875-8394
INFORMATION FOR SEQ ID NO: 30:
SEQUENCE CHARACTERISTICS:
LENGTH: 62 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: both
US-08-503-730-30

Query Match 80.0%; Score 12; DB 1; Length 62;
Best Local Similarity 100.0%; Pred. No. 5.8e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 ccatggtgctca 13
Db 13 CCATGGTGCTCA 2

RESULT 13
US-08-832-468-6
Sequence 6, Application US/08832468
Patent No. 5962237
GENERAL INFORMATION:
APPLICANT: Ts'o, Paul O.P.
APPLICANT: Wang, Zheng-pin
APPLICANT: Lesko, Stephen A.
APPLICANT: Nelson, William G.
APPLICANT: Partin, Alan W.
TITLE OF INVENTION: A METHOD OF ENRICHING RARE CELLS
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Leydig, Voit & Mayer, Ltd.
STREET: 700 Thirteenth St., NW
CITY: Washington
STATE: DC
COUNTRY: US
ZIP: 20005
COMPUTER READABLE FORM:

ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
ZIP: 90071-2066

COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 MB
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/584,040
FILING DATE: January 11, 1996
CLASSIFICATION: 514

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/005,974
FILING DATE: October 26, 1995
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 218/064
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510

INFORMATION FOR SEQ ID NO: 4423:
SEQUENCE CHARACTERISTICS:
LENGTH: 54 base pairs
TYPE: nucleic acid

```
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-584-040-4423
```

```
Query Match      78.7%; Score 11.8; DB 4; Length 54;
Best Local Similarity 86.7%; Pred. No. 7.4e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 tccatgggtctcact 15
   |||||||
Db 26 TCCTGGGCTCACT 12
```

```
Search completed: July 21, 2002, 03:52:46
Job time: 17781 sec
```

THIS PAGE BLANK (USPTO)

GenCore version 4.5
Copyright (c) 1993 - 2000 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: July 21, 2002, 02:55:01 ; Search time 2682.64 Seconds
(without alignments)
120.972 Million cell updates/sec

Title: us-09-716-320-3

Perfect score: 15

Sequence: 1 tccatgggtgctcact 15

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 21979536 seqs, 10817449327 residues

Total number of hits satisfying chosen parameters: 11371150

Minimum DB seq length: 0

Maximum DB seq length: 100

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Pending_Patents_NA_Main:*

- 1: /cgn2_6/ptodata/2/pna/PCTUS_COMB.seq:*
- 2: /cgn2_6/ptodata/2/pna/US06_COMB.seq:*
- 3: /cgn2_6/ptodata/2/pna/US07_COMB.seq:*
- 4: /cgn2_6/ptodata/2/pna/US080_COMB.seq:*
- 5: /cgn2_6/ptodata/2/pna/US081_COMB.seq:*
- 6: /cgn2_6/ptodata/2/pna/US082_COMB.seq:*
- 7: /cgn2_6/ptodata/2/pna/US083_COMB.seq:*
- 8: /cgn2_6/ptodata/2/pna/US084_COMB.seq:*
- 9: /cgn2_6/ptodata/2/pna/US085_COMB.seq:*
- 10: /cgn2_6/ptodata/2/pna/US086_COMB.seq:*
- 11: /cgn2_6/ptodata/2/pna/US087_COMB.seq:*
- 12: /cgn2_6/ptodata/2/pna/US088_COMB.seq:*
- 13: /cgn2_6/ptodata/2/pna/US089_COMB.seq:*
- 14: /cgn2_6/ptodata/2/pna/US090_COMB.seq:*
- 15: /cgn2_6/ptodata/2/pna/US091_COMB.seq:*
- 16: /cgn2_6/ptodata/2/pna/US092_COMB.seq:*
- 17: /cgn2_6/ptodata/2/pna/US093_COMB.seq:*
- 18: /cgn2_6/ptodata/2/pna/US094_COMB.seq:*
- 19: /cgn2_6/ptodata/2/pna/US095A_COMB.seq:*
- 20: /cgn2_6/ptodata/2/pna/US095B_COMB.seq:*
- 21: /cgn2_6/ptodata/2/pna/US095C_COMB.seq:*
- 22: /cgn2_6/ptodata/2/pna/US095D_COMB.seq:*
- 23: /cgn2_6/ptodata/2/pna/US096A_COMB.seq:*
- 24: /cgn2_6/ptodata/2/pna/US096B_COMB.seq:*
- 25: /cgn2_6/ptodata/2/pna/US096C_COMB.seq:*
- 26: /cgn2_6/ptodata/2/pna/US096D_COMB.seq:*
- 27: /cgn2_6/ptodata/2/pna/US096E_COMB.seq:*
- 28: /cgn2_6/ptodata/2/pna/US097A_COMB.seq:*
- 29: /cgn2_6/ptodata/2/pna/US097B_COMB.seq:*
- 30: /cgn2_6/ptodata/2/pna/US097C_COMB.seq:*
- 31: /cgn2_6/ptodata/2/pna/US098A_COMB.seq:*
- 32: /cgn2_6/ptodata/2/pna/US098B_COMB.seq:*
- 33: /cgn2_6/ptodata/2/pna/US098C_COMB.seq:*
- 34: /cgn2_6/ptodata/2/pna/US099A_COMB.seq:*
- 35: /cgn2_6/ptodata/2/pna/US099B_COMB.seq:*
- 36: /cgn2_6/ptodata/2/pna/US099C_COMB.seq:*
- 37: /cgn2_6/ptodata/2/pna/US100_COMB.seq:*
- 38: /cgn2_6/ptodata/2/pna/US101_COMB.seq:*
- 39: /cgn2_6/ptodata/2/pna/US6000_COMB.seq:*
- 40: /cgn2_6/ptodata/2/pna/US6001_COMB.seq:*
- 41: /cgn2_6/ptodata/2/pna/US6002_COMB.seq:*
- 42: /cgn2_6/ptodata/2/pna/US6003_COMB.seq:*
- 43: /cgn2_6/ptodata/2/pna/US6004_COMB.seq:*

44: /cgn2_6/ptodata/2/pna/US6005_COMB.seq:*

45: /cgn2_6/ptodata/2/pna/US6006_COMB.seq:*

46: /cgn2_6/ptodata/2/pna/US6007_COMB.seq:*

47: /cgn2_6/ptodata/2/pna/US6008_COMB.seq:*

48: /cgn2_6/ptodata/2/pna/US6009_COMB.seq:*

49: /cgn2_6/ptodata/2/pna/US6010_COMB.seq:*

50: /cgn2_6/ptodata/2/pna/US6011_COMB.seq:*

51: /cgn2_6/ptodata/2/pna/US6012_COMB.seq:*

52: /cgn2_6/ptodata/2/pna/US6013_COMB.seq:*

53: /cgn2_6/ptodata/2/pna/US6014_COMB.seq:*

54: /cgn2_6/ptodata/2/pna/US6015_COMB.seq:*

55: /cgn2_6/ptodata/2/pna/US6016_COMB.seq:*

56: /cgn2_6/ptodata/2/pna/US6017_COMB.seq:*

57: /cgn2_6/ptodata/2/pna/US6018_COMB.seq:*

58: /cgn2_6/ptodata/2/pna/US6019_COMB.seq:*

59: /cgn2_6/ptodata/2/pna/US6020_COMB.seq:*

60: /cgn2_6/ptodata/2/pna/US6021_COMB.seq:*

61: /cgn2_6/ptodata/2/pna/US6022_COMB.seq:*

62: /cgn2_6/ptodata/2/pna/US6023_COMB.seq:*

63: /cgn2_6/ptodata/2/pna/US6024_COMB.seq:*

64: /cgn2_6/ptodata/2/pna/US6025_COMB.seq:*

65: /cgn2_6/ptodata/2/pna/US6026_COMB.seq:*

66: /cgn2_6/ptodata/2/pna/US6027_COMB.seq:*

67: /cgn2_6/ptodata/2/pna/US6028_COMB.seq:*

68: /cgn2_6/ptodata/2/pna/US6029_COMB.seq:*

69: /cgn2_6/ptodata/2/pna/US6030_COMB.seq:*

70: /cgn2_6/ptodata/2/pna/US6031_COMB.seq:*

71: /cgn2_6/ptodata/2/pna/US6032_COMB.seq:*

72: /cgn2_6/ptodata/2/pna/US6033_COMB.seq:*

73: /cgn2_6/ptodata/2/pna/US6034_COMB.seq:*

74: /cgn2_6/ptodata/2/pna/US6035_COMB.seq:*

75: /cgn2_6/ptodata/2/pna/US6036_COMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB	ID	Description
C 1	15	100.0	15	18	US-09-406-643-255	Sequence 255, Appli
C 2	15	100.0	15	18	US-09-480-143-3	Sequence 3, Appli
C 3	15	100.0	15	28	US-09-716-320-3	Sequence 3, Appli
C 4	15	100.0	19	26	US-09-669-187A-13	Sequence 13, Appli
C 5	15	100.0	19	33	US-09-888-326-66	Sequence 66, Appli
C 6	15	100.0	19	37	US-10-017-995-13	Sequence 13, Appli
C 7	15	100.0	24	3	US-07-936-531A-4	Sequence 4, Appli
C 8	15	100.0	24	11	US-08-780-074-4	Sequence 4, Appli
C 9	15	100.0	51	56	US-60-172-373-13441	Sequence 13441, A
C 10	14	93.3	17	18	US-09-474-432B-576	Sequence 576, App
C 11	14	93.3	17	18	US-09-476-387-575	Sequence 575, App
C 12	14	93.3	17	31	US-09-825-805-575	Sequence 575, App
C 13	14	93.3	51	29	US-09-726-173A-2507	Sequence 2507, Ap
C 14	14	93.3	51	56	US-60-172-360-22019	Sequence 22019, A
C 15	14	93.3	51	66	US-60-278-232-5518	Sequence 5518, Ap
C 16	13.4	89.3	24	15	US-09-147-773A-1	Sequence 1, Appli
C 17	13.4	89.3	25	35	US-09-956-584-426077	Sequence 426077, Sequence 451230,
C 18	13.4	89.3	25	62	US-60-234-017-451230	Sequence 451230, A
C 19	13.4	89.3	73	21	US-09-540-766-63011	Sequence 105, App
C 20	13	86.7	14	10	US-08-666-341A-105	Sequence 1137, Ap
C 21	13	86.7	14	17	US-09-341-700A-1137	Sequence 256, App
C 22	13	86.7	15	18	US-09-406-643-256	Sequence 325, App
C 23	13	86.7	16	17	US-09-341-700A-325	Sequence 3, Appli
C 24	13	86.7	19	1	PCT-US01-25502-3	Sequence 3, Appli
C 25	13	86.7	19	16	US-09-234-208B-3	Sequence 3, Appli
C 26	13	86.7	19	24	US-09-630-155-3	Sequence 3, Appli
C 27	13	86.7	20	18	US-09-490-094-3	Sequence 3, Appli
C 28	13	86.7	20	28	US-09-715-418-9	Sequence 9, Appli
C 29	13	86.7	20	29	US-09-741-297-3	Sequence 3, Appli
C 30	13	86.7	26	3	US-07-644-233-18	Sequence 18, Appli
C 31	13	86.7	26	5	US-08-137-689-18	Sequence 18, Appli

32 13 86.7 26 5 US-08-139-639-18 Sequence 18, Appl
33 13 86.7 39 68 US-60-298-340-23 Sequence 23, Appl
c 34 12.4 82.7 20 1 PCT-US00-00325-94 Sequence 94, Appl
35 12.4 82.7 20 16 US-09-232-785-94 Sequence 94, Appl
36 12.4 82.7 20 16 US-09-232-884-94 Sequence 94, Appl
c 37 12.4 82.7 22 3 US-07-868-569-5 Sequence 5, Appl
c 38 12.4 82.7 25 17 US-09-396-196F-53471 Sequence 53471, A
c 39 12.4 82.7 25 17 US-09-396-196F-53472 Sequence 53472, A
c 40 12.4 82.7 25 26 US-09-660-220-50129 Sequence 50129, A
c 41 12.4 82.7 25 26 US-09-660-220-137820 Sequence 137820, A
c 42 12.4 82.7 25 35 US-09-954-427-52165 Sequence 52165, A
c 43 12.4 82.7 25 62 US-60-233-166-52165 Sequence 52165, A
c 44 12.4 82.7 25 74 US-60-353-987-688919 Sequence 688919, A
c 45 12.4 82.7 25 74 US-60-353-987-696770 Sequence 696770, A

ALIGNMENTS

RESULT 1

US-09-406-643-255/c
; Sequence 255, Application US/09406643
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Ludwig, Janos
; APPLICANT: Sproat, Brian
; APPLICANT: Beigelman, Leonid
; TITLE OF INVENTION: Compositions Having RNA Cleaving Activity
; FILE REFERENCE: MBH00-874-A (237/197)
; CURRENT APPLICATION NUMBER: US/09/406,643
; CURRENT FILING DATE: 1999-09-27
; PRIOR APPLICATION NUMBER: US 08/879,078
; PRIOR FILING DATE: 1997-06-19
; PRIOR APPLICATION NUMBER: US 08/878,640
; PRIOR FILING DATE: 1997-06-19
; NUMBER OF SEQ ID NOS: 2606
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 255
; LENGTH: 15
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-406-643-255

Query Match 100.0%; Score 15; DB 18; Length 15;
Best Local Similarity 100.0%; Pred. No. 6.5e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 tccatggtgtcact 15
| | | | | | | | | | | | | | |
Db 15 TCCATGGTGTCTACT 1

RESULT 2

US-09-480-143-3
; Sequence 3, Application US/09480143
; GENERAL INFORMATION:
; APPLICANT: Chang, Esther H.
; APPLICANT: Pirollo, Kathleen F.
; TITLE OF INVENTION: Compositions and Methods for Reducing Radiation and Drug Resis
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Sana A. Pratt
; STREET: 10821 Hillbrooke Lane
; CITY: Potomac
; STATE: MARYLAND
; COUNTRY: USA
; ZIP: 20854
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: Apple Macintosh
; OPERATING SYSTEM: Macintosh 7.5
; SOFTWARE: Microsoft Word 6.0

; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/480,143
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/991,830
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Sana A. Pratt
; REGISTRATION NUMBER: 39,441
; REFERENCE/DOCKET NUMBER:
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (301) 294-9171
; TELEFAX: (301) 294-7357
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15 base pairs
; TYPE: Nucleic acid
; STRANDEDNESS: Single
; TOPOLOGY: Linear
; MOLECULE TYPE: DNA
US-09-480-143-3

Query Match 100.0%; Score 15; DB 18; Length 15;
Best Local Similarity 100.0%; Pred. No. 6.5e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 tccatggtgtcact 15
| | | | | | | | | | | | | | |
Db 1 TCCATGGTGTCTACT 15

RESULT 3

US-09-716-320-3
; Sequence 3, Application US/09716320
; GENERAL INFORMATION:
; APPLICANT: Chang, Esther H
; APPLICANT: Pirollo, Kathleen F
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR REDUCING RADIATION AND DRUG RESIS
; FILE REFERENCE: 2444-109
; CURRENT APPLICATION NUMBER: US/09/716,320
; CURRENT FILING DATE: 2000-11-21
; PRIOR APPLICATION NUMBER: US 09/480,143
; PRIOR FILING DATE: 2000-01-10
; PRIOR APPLICATION NUMBER: US 08/991,830
; PRIOR FILING DATE: 1997-12-16
; PRIOR APPLICATION NUMBER: US 60/034,160
; PRIOR FILING DATE: 1996-12-30
; PRIOR APPLICATION NUMBER: US 09/601,444
; PRIOR FILING DATE: 2001-01-04
; PRIOR APPLICATION NUMBER: PCT/US98/24657
; PRIOR FILING DATE: 1998-11-19
; PRIOR APPLICATION NUMBER: US 60/066,188
; PRIOR FILING DATE: 1997-11-19
; PRIOR APPLICATION NUMBER: US 60/083,175
; PRIOR FILING DATE: 1998-04-27
; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Human
US-09-716-320-3

Query Match 100.0%; Score 15; DB 28; Length 15;
Best Local Similarity 100.0%; Pred. No. 6.5e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 tccatggtgtcact 15
| | | | | | | | | | | | | | |
Db 1 tccatggtgtcact 15

RESULT 4
US-09-669-187A-13
; Sequence 13, Application US/09669187A
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schetter, Christian
; APPLICANT: Vollmer, Jorg
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids
; FILE REFERENCE: C1039/7035 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/669,187A
; PRIOR FILING DATE: 2000-09-25
; PRIOR APPLICATION NUMBER: US 60/156,113
; PRIOR FILING DATE: 1999-09-25
; PRIOR APPLICATION NUMBER: US 60/156,135
; PRIOR FILING DATE: 1999-09-27
; PRIOR APPLICATION NUMBER: US 60/227,436
; PRIOR FILING DATE: 2000-08-23
; NUMBER OF SEQ ID NOS: 1145
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 13
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-669-187A-13

Query Match 100.0%; Score 15; DB 26; Length 19;
Best Local Similarity 100.0%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 tccatggtgctcact 15
|||||
Db 4 tccatggtgctcact 18

RESULT 5
US-09-888-326-66
; Sequence 66, Application US/09888326
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; TITLE OF INVENTION: Cell Lysis and Treating Cancer
; FILE REFERENCE: C1039/7052 (AWS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; PRIOR FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 66
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: phosphorothioate backbone
US-09-888-326-66

Query Match 100.0%; Score 15; DB 33; Length 19;
Best Local Similarity 100.0%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 tccatggtgctcact 15
|||||
Db 4 tccatggtgctcact 18

RESULT 6
US-10-017-995-13
; Sequence 13, Application US/10017995
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; TITLE OF INVENTION: Inhibition of Angiogenesis by Nucleic Acids
; FILE REFERENCE: C1037/7025 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/017,995
; CURRENT FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: US 60/255,534
; PRIOR FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 13
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-017-995-13

Query Match 100.0%; Score 15; DB 37; Length 19;
Best Local Similarity 100.0%; Pred. No. 6.7e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 tccatggtgctcact 15
|||||
Db 4 tccatggtgctcact 18

RESULT 7
US-07-936-531A-4/c
; Sequence 4, Application US/07936531A
; GENERAL INFORMATION:
; APPLICANT: James D. Thompson
; APPLICANT: Kenneth G. Draper
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: TREATMENT OF BREAST CANCER
; NUMBER OF SEQUENCES: 118
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 611 West Sixth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90017
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS (Version 5.0)
; SOFTWARE: WordPerfect (Version 5.1)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/936,531A
; FILING DATE: 19920826
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; PRIOR APPLICATION DATA: including application
; PRIOR APPLICATION DATA: described below:
; APPLICATION NUMBER:
; -FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 197/245
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:

none

Db 17 CCATGGTGCTCACT 4

RESULT 11

US-09-476-387-575/c
; Sequence 575, Application US/09476387
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Beigelman, Leo
; APPLICANT: Beaudry, Amber
; APPLICANT: Karpeisky, Alex
; APPLICANT: Adamic, Jasenka Matulic
; APPLICANT: Sweedler, Dave
; APPLICANT: Zinnen, Shawn
; TITLE OF INVENTION: Nucleotide Triphosphate and their Incorporation into Oligonucleotides
; FILE REFERENCE: MBH00-831-C (249/073)
; CURRENT APPLICATION NUMBER: US/09/476,387
; CURRENT FILING DATE: 2001-04-04
; PRIOR APPLICATION NUMBER: 09/474,432
; PRIOR FILING DATE: 1999-12-29
; PRIOR APPLICATION NUMBER: 09/301,511
; PRIOR FILING DATE: 1999-04-28
; PRIOR APPLICATION NUMBER: 09/186,675
; PRIOR FILING DATE: 1998-11-04
; PRIOR APPLICATION NUMBER: 60/083,727
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/064,866
; PRIOR FILING DATE: 1997-11-05
; NUMBER OF SEQ ID NOS: 1524
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 575
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-476-387-575

Query Match 93.3%; Score 14; DB 18; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.4e+03;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 ccattgtgtctcact 15
|||||

Db 17 CCATGGTGCTCACT 4

RESULT 12

US-09-825-805-575/c
; Sequence 575, Application US/09825805
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Beigelman, Leo
; APPLICANT: Beaudry, Amber
; APPLICANT: Karpeisky, Alex
; APPLICANT: Adamic, Jasenka Matulic
; APPLICANT: Sweedler, Dave
; APPLICANT: Zinnen, Shawn
; TITLE OF INVENTION: Nucleotide Triphosphate and their Incorporation into Oligonucleotides
; FILE REFERENCE: MBH00-831-F (400/009)
; CURRENT APPLICATION NUMBER: US/09/825,805
; CURRENT FILING DATE: 2001-09-27
; PRIOR APPLICATION NUMBER: 09/578,223
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 09/476,387
; PRIOR FILING DATE: 1999-12-30
; PRIOR APPLICATION NUMBER: 09/474,432
; PRIOR FILING DATE: 1999-12-29
; PRIOR APPLICATION NUMBER: 09/301,511
; PRIOR FILING DATE: 1999-04-28
; PRIOR APPLICATION NUMBER: 09/186,675
; PRIOR FILING DATE: 1998-11-04
; PRIOR APPLICATION NUMBER: 60/083,727
; PRIOR FILING DATE: 1998-04-29

Query Match 93.3%; Score 14; DB 31; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.4e+03;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 ccattgtgtctcact 15
|||||

Db 17 CCATGGTGCTCACT 4

RESULT 13

US-09-726-173A-2507
; Sequence 2507, Application US/09726173A
; GENERAL INFORMATION:
; APPLICANT: Shimkets, Richard A.
; APPLICANT: Leach, Martin D.
; TITLE OF INVENTION: NUCLEIC ACIDS CONTAINING SINGLE NUCLEIC ACID POLYMORPHISMS AND
; TITLE OF INVENTION: USE THEREOF
; FILE REFERENCE: 15966-600
; CURRENT APPLICATION NUMBER: US/09/726,173A
; CURRENT FILING DATE: 2002-03-08
; PRIOR APPLICATION NUMBER: 60/168,138
; PRIOR FILING DATE: 1999-11-30
; NUMBER OF SEQ ID NOS: 7024
; SOFTWARE: CuraGen Patent Formatter Version 0.9
; SEQ ID NO 2507
; LENGTH: 51
; TYPE: DNA
; ORGANISM: Homo sapiens
; NAME/KEY: misc_feature
; LOCATION: (26)...(0)
; OTHER INFORMATION: 1 of 2 allelic variants (2508 is other entry)
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: Accession number cg39714236
US-09-726-173A-2507

Query Match 93.3%; Score 14; DB 29; Length 51;
Best Local Similarity 100.0%; Pred. No. 2.7e+03;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 ccattgtgtctcact 15
|||||

Db 17 CCATGGTGCTCACT 30

RESULT 14

US-60-172-360-22019/c
; Sequence 22019, Application US/60172360
; GENERAL INFORMATION:
; APPLICANT: Morris, MacDonald
; APPLICANT: Lal, Preeti
; APPLICANT: Diep, Dinh
; TITLE OF INVENTION: Polynucleotide Sequence Databases, and Single Nucleotide Poly-
; FILE REFERENCE: GX-0007 P
; CURRENT APPLICATION NUMBER: US/60/172,360
; CURRENT FILING DATE: 1999-12-16
; NUMBER OF SEQ ID NOS: 29838
; SOFTWARE: PERL Program

```
; SEQ ID NO 22019
; LENGTH: 51
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No: SNF00037393
; FEATURE:
; NAME/KEY: snp
; LOCATION: 26
; OTHER INFORMATION: 383094.3, 615, C->T
US-60-172-360-22019
```

```
Query Match          93.3%; Score 14; DB 56; Length 51;
Best Local Similarity 100.0%; Pred. No. 2.7e+03;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 tccatggtgctcac 14
   |||
Db 29 TCCATGGTGTCTAC 16
```

```
RESULT 15
US-60-278-232-5518/c
; Sequence 5518, Application US/60278232
; GENERAL INFORMATION:
; APPLICANT: Morris, MacDonald
; APPLICANT: Lal, Preeti
; APPLICANT: Diep, Dinh
; TITLE OF INVENTION: Method for the Identification of Sequence Polymorphisms Using
; TITLE OF INVENTION: Polynucleotide Sequence Databases, and Single Nucleotide
; TITLE OF INVENTION: Polymorphisms Identified Thereby
; FILE REFERENCE: GX-0011 P
; CURRENT APPLICATION NUMBER: US/60/278,232
; CURRENT FILING DATE: 2001-03-30
; NUMBER OF SEQ ID NOS: 12,557
; SOFTWARE: PERL Program
; SEQ ID NO 5518
; LENGTH: 51
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No: SNF00047234
; NAME/KEY: snp
; LOCATION: 26
; OTHER INFORMATION: 245722.5, 91, G->A
US-60-278-232-5518
```

```
Query Match          93.3%; Score 14; DB 66; Length 51;
Best Local Similarity 100.0%; Pred. No. 2.7e+03;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 ccatggtgctcac 15
   |||
Db 35 CCATGGTGTCTACT 22
```

Search completed: July 21, 2002, 04:41:36
Job time: 6395 sec

GenCore version 4.5
Copyright (c) 1993 - 2000 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: July 21, 2002, 03:21:26 ; Search time 195.72 Seconds
(without alignments)
144,300 Million cell updates/sec

Title: US-09-716-320-3
Perfect score: 15
Sequence: 1 tccatgtgtctact 15

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1225709 seqs, 941415038 residues

Total number of hits satisfying chosen parameters: 629858

Minimum DB seq length: 0
Maximum DB seq length: 100

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Pending_Patents_NA_New.*
1: /cgn2_6/ptodata/2/pna/PCT_NEW_COMB.seq.*
2: /cgn2_6/ptodata/2/pna/US06_NEW_COMB.seq.*
3: /cgn2_6/ptodata/2/pna/US07_NEW_COMB.seq.*
4: /cgn2_6/ptodata/2/pna/US08_NEW_COMB.seq.*
5: /cgn2_6/ptodata/2/pna/US09_NEW_COMB.seq.*
6: /cgn2_6/ptodata/2/pna/US10_NEW_COMB.seq.*
7: /cgn2_6/ptodata/2/pna/US60_NEW_COMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Query	Score	Match	Length	ID	Description
C 1	15	100.0	15	5	US-09-498-824A-255	Sequence 255, App
C 2	15	100.0	17	6	US-10-163-552-38	Sequence 38, Appl
C 3	15	100.0	19	6	US-10-112-653-13	Sequence 13, Appl
C 4	14	93.3	17	6	US-10-163-552-37	Sequence 37, Appl
C 5	13	86.7	15	5	US-09-498-824A-256	Sequence 256, App
C 6	13	86.7	17	6	US-10-163-552-39	Sequence 39, Appl
C 7	13	86.7	19	5	US-09-638-834A-3	Sequence 3, Appl
C 8	13	86.7	39	6	US-10-173-461-24	Sequence 24, Appl
C 9	12.4	82.7	71	5	US-09-539-331D-9880	Sequence 9880, Ap
C 10	12	80.0	15	5	US-09-498-824A-1	Sequence 1, Appl
C 11	11.8	78.7	17	6	US-10-138-674-6193	Sequence 6193, Ap
C 12	11.8	78.7	17	6	US-10-138-674-6194	Sequence 6194, Ap
C 13	11.8	78.7	17	6	US-10-138-674-8504	Sequence 8504, Ap
C 14	11.8	78.7	19	5	US-09-909-567B-34	Sequence 34, Appl
C 15	11.8	78.7	54	6	US-10-138-674-11609	Sequence 11609, A
C 16	11.8	78.7	60	6	US-10-149-187-4	Sequence 4, Appl
C 17	11.8	78.7	100	6	US-10-104-545-3	Sequence 3, Appl
C 18	11.4	76.0	20	5	US-09-922-549B-20	Sequence 20, Appl
C 19	11.4	76.0	20	5	US-09-937-473C-190	Sequence 190, App
C 20	11.4	76.0	24	5	US-09-792-468-2	Sequence 2, Appl
C 21	11.4	76.0	26	6	US-10-027-632-52388	Sequence 52388, A
C 22	11.4	76.0	66	5	US-09-284-349A-2	Sequence 2, Appl
C 23	11	73.3	14	4	US-08-431-644B-16	Sequence 16, Appl
C 24	11	73.3	99	5	US-09-975-254-16421	Sequence 16421, A
C 25	10.8	72.0	18	6	US-10-108-732-12	Sequence 12, Appl
C 26	10.8	72.0	20	5	US-09-544-398A-404	Sequence 404, App

C 27	10.8	72.0	20	5	US-09-544-398B-404	Sequence 404, App
C 28	10.8	72.0	24	5	US-09-978-403A-53	Sequence 53, Appl
C 29	10.8	72.0	24	5	US-09-978-544A-53	Sequence 53, Appl
C 30	10.8	72.0	24	5	US-09-978-681A-53	Sequence 53, Appl
C 31	10.8	72.0	24	5	US-09-978-757A-53	Sequence 53, Appl
C 32	10.8	72.0	24	5	US-09-978-564A-53	Sequence 53, Appl
C 33	10.8	72.0	24	5	US-09-999-831A-53	Sequence 53, Appl
C 34	10.8	72.0	24	5	US-09-999-829A-53	Sequence 53, Appl
C 35	10.8	72.0	24	5	US-09-978-375A-53	Sequence 53, Appl
C 36	10.8	72.0	24	5	US-09-978-423A-53	Sequence 53, Appl
C 37	10.8	72.0	24	6	US-10-013-921A-53	Sequence 53, Appl
C 38	10.8	72.0	24	6	US-10-013-929A-53	Sequence 53, Appl
C 39	10.8	72.0	24	6	US-10-013-918A-53	Sequence 53, Appl
C 40	10.8	72.0	24	6	US-10-017-082A-53	Sequence 53, Appl
C 41	10.8	72.0	24	6	US-10-017-085A-53	Sequence 53, Appl
C 42	10.8	72.0	24	6	US-10-013-916A-53	Sequence 53, Appl
C 43	10.8	72.0	24	6	US-10-017-086A-53	Sequence 53, Appl
C 44	10.8	72.0	24	6	US-10-013-925A-53	Sequence 53, Appl
C 45	10.8	72.0	24	6	US-10-017-081A-53	Sequence 53, Appl

ALIGNMENTS

RESULT 1
US-09-498-824A-255/c
; Sequence 255, Application US/09498824A
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Ludwig, Janos
; APPLICANT: Spiroat, Brian
; APPLICANT: Beigelman, Leo
; TITLE OF INVENTION: Compositions Having RNA Cleaving Activity
; FILE REFERENCE: MBH00-874-D (247/280)
; CURRENT APPLICATION NUMBER: US/09/498, 824A
; CURRENT FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: US 09/406,643
; PRIOR FILING DATE: 1999-09-27
; PRIOR APPLICATION NUMBER: US 08/878,640
; PRIOR FILING DATE: 1997-06-19
; PRIOR APPLICATION NUMBER: US 08/879,078
; PRIOR FILING DATE: 1997-06-19
; NUMBER OF SEQ ID NOS: 3516
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 255
; LENGTH: 15
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-498-824A-255

Query Match 100.0%; Score 15; DB 5; Length 15;
Best Local Similarity 100.0%; Pred. No. 68;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 tccatgtgtctact 15
Db 15 TCCATGTGTCTACT 1
|||||

RESULT 2
US-10-163-552-38/c
; Sequence 38, Application US/10163552
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Nucleic acid treatment of diseases or conditions related to 1
; FILE REFERENCE: MBH01-1653-A (400/014)
; CURRENT APPLICATION NUMBER: US/10/163,552
; CURRENT FILING DATE: 2002-06-06
; NUMBER OF SEQ ID NOS: 1997
; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 38
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-163-552-38

Query Match 100.0%; Score 15; DB 6; Length 17;
Best Local Similarity 100.0%; Pred. No. 69;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 tccatggtgctcact 15
|||||
DB 16 TCCATGGTGCTCACT 2

RESULT 3
US-10-112-653-13
; Sequence 13, Application US/10112653
; GENERAL INFORMATION:
; APPLICANT: Krieger, Arthur M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR
; FILE REFERENCE: C01039/70060(US)
; CURRENT APPLICATION NUMBER: US/10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 13
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-112-653-13

Query Match 100.0%; Score 15; DB 6; Length 19;
Best Local Similarity 100.0%; Pred. No. 69;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 tccatggtgctcact 15
|||||
DB 4 tccatggtgctcact 18

RESULT 4
US-10-163-552-37/c
; Sequence 37, Application US/10163552
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; TITLE OF INVENTION: Nucleic acid treatment of diseases or conditions related to level
; FILE REFERENCE: MBH01-1653-A (400/014)
; CURRENT APPLICATION NUMBER: US/10/163,552
; CURRENT FILING DATE: 2002-06-06
; NUMBER OF SEQ ID NOS: 1997
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 37
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-163-552-37

Query Match 93.3%; Score 14; DB 6; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 ccatggtgctcact 15
|||||
DB 17 CCATGGTGCTCACT 4

RESULT 5
US-09-498-824A-256/c
; Sequence 256, Application US/09498824A
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Ludwig, Janos
; APPLICANT: Sproat, Brian
; APPLICANT: Beigelman, Leo
; TITLE OF INVENTION: Compositions Having RNA Cleaving Activity
; FILE REFERENCE: MBH00-874-D (247/280)
; CURRENT APPLICATION NUMBER: US/09/498,824A
; CURRENT FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: US 09/406,643
; PRIOR FILING DATE: 1999-09-27
; PRIOR APPLICATION NUMBER: US 08/878,640
; PRIOR FILING DATE: 1997-06-19
; PRIOR APPLICATION NUMBER: US 08/879,078
; NUMBER OF SEQ ID NOS: 3516
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 256
; LENGTH: 15
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-498-824A-256

Query Match 86.7%; Score 13; DB 5; Length 15;
Best Local Similarity 100.0%; Pred. No. 9.1e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 tccatggtgctca 13
|||||
DB 13 TCCATGGTGCTCA 1

RESULT 6
US-10-163-552-39/c
; Sequence 39, Application US/10163552
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: McSwiggen, Jim
; TITLE OF INVENTION: Nucleic acid treatment of diseases or conditions related to le
; FILE REFERENCE: MBH01-1653-A (400/014)
; CURRENT APPLICATION NUMBER: US/10/163,552
; CURRENT FILING DATE: 2002-06-06
; NUMBER OF SEQ ID NOS: 1997
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 39
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-163-552-39

Query Match 86.7%; Score 13; DB 6; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 tccatggtgctca 13
|||||
DB 13 TCCATGGTGCTCA 1

RESULT 7
US-09-638-834A-3/c
; Sequence 3, Application US/09638834A


```
; GENERAL INFORMATION:
; APPLICANT: Clinton, Gail M.
; TITLE OF INVENTION: Expression of Herstatin, an Alternative HER-2/NEU Product, in Cell
; TITLE OF INVENTION: Express either p185HER-2 or the EGF Receptor Inhibits Receptor A
; TITLE OF INVENTION: Growth
; FILE REFERENCE: 49321-12
; CURRENT APPLICATION NUMBER: US/09/638,834A
; CURRENT FILING DATE: 2000-08-14
; PRIOR FILING DATE: US 09/234,208
; PRIOR APPLICATION NUMBER: US 09/506,079
; PRIOR FILING DATE: 2000-01-16
; NUMBER OF SEQ ID NOS: 10
; SEQ ID NO 3
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: HER-2-specific oligonucleotide primer
US-09-638-834A-3

Query Match      86.7%; Score 13; DB 5; Length 19;
Best Local Similarity 100.0%; Pred. No. 9.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 | tccatggtgctca 13
Db 13 | TCCATGGTGCTCA 1

RESULT 8
US-10-173-461-24/c
; Sequence 24, Application US/10173461
; GENERAL INFORMATION:
; APPLICANT: Bristol-Myers Squibb Company
; TITLE OF INVENTION: POLYNUCLEOTIDE ENCODING A NOVEL HUMAN GROWTH FACTOR WITH HOMOLOGU
; TITLE OF INVENTION: EPIDERMAL GROWTH FACTOR, BGS-8, EXPRESSED HIGHLY IN IMMUNE TISSU
; FILE REFERENCE: D0166 NP
; CURRENT APPLICATION NUMBER: US/10/173,461
; CURRENT FILING DATE: 2002-06-14
; PRIOR APPLICATION NUMBER: US 60/298,340
; PRIOR FILING DATE: 2001-06-14
; NUMBER OF SEQ ID NOS: 69
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 24
; LENGTH: 39
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-173-461-24

Query Match      86.7%; Score 13; DB 6; Length 39;
Best Local Similarity 100.0%; Pred. No. 9.5e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 | catggtgctcact 15
Db 39 | CATGGTGCTCACT 27

RESULT 9
US-09-539-331D-9880
; Sequence 9880, Application US/09539331D
; GENERAL INFORMATION:
; APPLICANT: Seilhamer, Jeffrey J.
; APPLICANT: Delegeane, Angelo M.
; APPLICANT: Stuart, Susan G.
; APPLICANT: Stuve, Laura L.
; APPLICANT: Mullahy, Sara J.
; APPLICANT: Naughton, Rebecca E.
; TITLE OF INVENTION: POLYNUCLEOTIDES OF CARDIOVASCULAR SYSTEM TISSUE
; FILE REFERENCE: PD-1022 CIP
```

```
; CURRENT APPLICATION NUMBER: US/09/539,331D
; CURRENT FILING DATE: 2000-03-30
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 40961
; SOFTWARE: PERL Program
; SEQ ID NO 9880
; LENGTH: 71
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No: hu00367562
; NAME/KEY: unsure
; LOCATION: 17, 47
; OTHER INFORMATION: a, t, c, g, or other
US-09-539-331D-9880

Query Match      82.7%; Score 12.4; DB 5; Length 71;
Best Local Similarity 86.7%; Pred. No. 2.1e+03;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 | tccatggtgctcact 15
Db 40 | tccatggtgctgact 54

RESULT 10
US-09-498-824A-1/c
; Sequence 1, Application US/09498824A
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Ludwig, Janos
; APPLICANT: Sproat, Brian
; APPLICANT: Beigelman, Leo
; TITLE OF INVENTION: Compositions Having RNA Cleaving Activity
; FILE REFERENCE: MBH00-874-D (247/280)
; CURRENT APPLICATION NUMBER: US/09/498,824A
; CURRENT FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: US 09/406,643
; PRIOR FILING DATE: 1999-09-27
; PRIOR APPLICATION NUMBER: US 08/878,640
; PRIOR FILING DATE: 1997-06-19
; PRIOR APPLICATION NUMBER: US 08/879,078
; PRIOR FILING DATE: 1997-06-19
; NUMBER OF SEQ ID NOS: 3516
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1
; LENGTH: 15
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-498-824A-1

Query Match      80.0%; Score 12; DB 5; Length 15;
Best Local Similarity 100.0%; Pred. No. 3.4e+03;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 | tccatggtgctc 12
Db 12 | TCCATGGTGCTC 1

RESULT 11
US-10-138-674-6193/c
; Sequence 6193, Application US/10138674
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Pavco, Pam
; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; APPLICANT: Escobedo, Jaime
```

```
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
; FILE OF INVENTION: Levels of Vascular Endothelial Growth Factor Receptor
; FILE REFERENCE: MBHB00-876-N (400/049)
; CURRENT APPLICATION NUMBER: US/10/138,674
; CURRENT FILING DATE: 2002-05-03
; NUMBER OF SEQ ID NOS: 20822
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 6193
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-138-674-6193

Query Match          78.7%; Score 11.8; DB 6; Length 17;
Best Local Similarity 86.7%; Pred. No. 4.4e+03;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 tccatggtgctcact 15
    ||||| || |||||
Db 17 TCCATGTTGGTCACT 3

RESULT 12
US-10-138-674-6194/c
; Sequence 6194, Application US/10138674
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Pavco, Pam
; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; APPLICANT: Escobedo, Jaime
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
; FILE REFERENCE: MBHB00-876-N (400/049)
; CURRENT APPLICATION NUMBER: US/10/138,674
; CURRENT FILING DATE: 2002-05-03
; NUMBER OF SEQ ID NOS: 20822
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 6194
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-138-674-6194

Query Match          78.7%; Score 11.8; DB 6; Length 17;
Best Local Similarity 86.7%; Pred. No. 4.4e+03;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 tccatggtgctcact 15
    ||||| || |||||
Db 16 TCCATGTTGGTCACT 2

RESULT 13
US-10-138-674-8504/c
; Sequence 8504, Application US/10138674
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Pavco, Pam
; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; APPLICANT: Escobedo, Jaime
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
; FILE REFERENCE: MBHB00-876-N (400/049)
; CURRENT APPLICATION NUMBER: US/10/138,674
; CURRENT FILING DATE: 2002-05-03
; NUMBER OF SEQ ID NOS: 20822
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 8504
; LENGTH: 17
```

```
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-138-674-8504

Query Match          78.7%; Score 11.8; DB 6; Length 17;
Best Local Similarity 86.7%; Pred. No. 4.4e+03;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 tccatggtgctcact 15
    ||||| || |||||
Db 15 TCCATGTTGGTCACT 1

RESULT 14
US-09-909-567B-34/c
; Sequence 34, Application US/09909567B
; GENERAL INFORMATION:
; APPLICANT: Macina, Roberto A.
; APPLICANT: Nair, Manoj
; APPLICANT: Chen, Seliyu
; TITLE OF INVENTION: Compositions and Methods Relating to Lung Specific Genes
; FILE REFERENCE: DEX-0214
; CURRENT APPLICATION NUMBER: US/09/909,567B
; CURRENT FILING DATE: 2001-07-20
; PRIOR APPLICATION NUMBER: 60/219,834
; PRIOR FILING DATE: 2000-07-21
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 34
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic
US-09-909-567B-34

Query Match          78.7%; Score 11.8; DB 5; Length 19;
Best Local Similarity 86.7%; Pred. No. 4.4e+03;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 tccatggtgctcact 15
    |||| ||||| ||
Db 16 TCCACGGTGCTCCCT 2

RESULT 15
US-10-138-674-11609/c
; Sequence 11609, Application US/10138674
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Pavco, Pam
; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; APPLICANT: Escobedo, Jaime
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions
; FILE REFERENCE: MBHB00-876-N (400/049)
; CURRENT APPLICATION NUMBER: US/10/138,674
; CURRENT FILING DATE: 2002-05-03
; NUMBER OF SEQ ID NOS: 20822
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 11609
; LENGTH: 54
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Enzymatic Nucleic Acid
US-10-138-674-11609

Query Match          78.7%; Score 11.8; DB 6; Length 54;
```

Best Local Similarity 86.7%; Pred. No. 4.5e+03;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 tccatggtgtctact 15
||| |||||
Db 26 TCTCTGGTGTCTACT 12

Search completed: July 21, 2002, 04:45:12
Job time: 5026 sec

THIS PAGE BLANK (USPTO)

GenCore version 4.5
Copyright (c) 1993 - 2000 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: July 20, 2002, 22:39:45 ; Search time 1566.41 seconds
(without alignments)
129.247 Million cell updates/sec

Title: US-09-716-320-3
Perfect score: 15
Sequence: 1 tccatgggtctcact 15

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 13736207 seqs, 6748477542 residues

Total number of hits satisfying chosen parameters: 297742

Minimum DB seq length: 0
Maximum DB seq length: 100

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

- EST:*
- 1: em_estba:*
 - 2: em_esthum:*
 - 3: em_estin:*
 - 4: em_estnu:*
 - 5: em_estov:*
 - 6: em_estpl:*
 - 7: em_estro:*
 - 8: em_htc:*
 - 9: gb_estl:*
 - 10: gb_est2:*
 - 11: gb_htc:*
 - 12: gb_gss:*
 - 13: em_gss_hum:*
 - 14: em_gss_inv:*
 - 15: em_gss_pln:*
 - 16: em_gss_vrt:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
C 1	13.4	89.3	75	10	BM023447
C 2	12.4	82.7	58	9	AI022662
C 3	12.4	82.7	74	9	AL362924
C 4	12.4	82.7	77	10	W15664
C 5	12.4	82.7	80	9	AV832470
C 6	12	80.0	62	12	AZ648327
C 7	12	80.0	82	12	TA138D06P
C 8	12	80.0	85	9	AI930840
C 9	12	80.0	90	9	AA690334
C 10	12	80.0	92	12	AZ590927
C 11	11.8	78.7	38	12	TA358F01P
C 12	11.8	78.7	65	9	AA285022
C 13	11.8	78.7	72	12	AZ799758
C 14	11.8	78.7	89	10	BI472373
C 15	11.8	78.7	91	9	AV834264
C 16	11.8	78.7	92	10	D18160
C 17	11.8	78.7	97	10	T62112

18	11.8	78.7	99	12	AZ433742
C 19	11.8	78.7	100	9	AA865812
C 20	11.4	76.0	22	12	AZ954618
C 21	11.4	76.0	46	9	AA591686
C 22	11.4	76.0	50	9	AA108275
C 23	11.4	76.0	50	9	AA102591
C 24	11.4	76.0	50	9	AA102592
C 25	11.4	76.0	50	9	AA102593
C 26	11.4	76.0	50	9	AA102594
C 27	11.4	76.0	50	9	AA102595
C 28	11.4	76.0	50	9	AA107574
C 29	11.4	76.0	56	9	AI656187
C 30	11.4	76.0	68	10	T72238
C 31	11.4	76.0	73	9	AA220616
C 32	11.4	76.0	74	10	BF528890
C 33	11.4	76.0	77	9	AA387938
C 34	11.4	76.0	77	10	T62949
C 35	11.4	76.0	85	9	AI167298
C 36	11.4	76.0	85	9	AA469098
C 37	11.4	76.0	85	9	AA529090
C 38	11.4	76.0	90	9	AA213781
C 39	11.4	76.0	91	9	AA089130
C 40	11.4	76.0	97	12	AZ834937
C 41	11.4	76.0	100	9	AW437175
C 42	11.4	76.0	100	9	AW809349
C 43	11.4	76.0	100	10	BF807260
C 44	11	73.3	31	9	AA981706
C 45	11	73.3	61	9	AI676111

ALIGNMENTS

BM023447 75 bp mRNA linear EST 30-OCT-2001
ie80e10.y1 Melton Normalized Human Islet 4 N4-HIS 1 Homo sapiens
CDNA 5', mRNA sequence.

BM023447 GI:16537803

EST.

human.

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 75)

Melton, D., Brown, J., Kenty, G., Permutt, A., Lee, C., Kaestner, K.,
Lemishka, I., Searce, M., Brestelli, J., Gradwohl, G., Clifton, S.,
Hillier, L., Marra, M., Pape, D., Wyllie, T., Martin, J., Blistain, A.,
Schmitt, A., Theising, B., Ritter, E., Ronko, I., Bennett, J., Cardenas
M., Gibbons, M., McCann, R., Cole, R., Tsagareishvili, R., Williams, T.,
Jackson, Y., and Bowers, Y.

Endocrine Pancreas Consortium

Unpublished (2000)

Other_ESTs: ie80e10.x1

Contact: Douglas Melton, Klaus H. Kaestner, & Hiroshi Inoue

Endocrine Pancreas Consortium

Harvard University, Howard Hughes Medical Institute

Dept of Molecular and Cellular Biology, 7 Divinity Ave, Cambridge,

MA 02138

Tel: 617-495-1812

Fax: 617-495-8557

Email: dmelton@biohp.harvard.edu

Library was constructed by Dr. Douglas Melton DNA sequencing by:
Washington University Genome Sequencing Center For information on
obtaining a clone please contact: Juliana Brown
(brown@fas.harvard.edu)

Putative full length read

vector to vector length is 76.

Location/Qualifiers

1. .75

/organism="Homo sapiens"

/db_xref="taxon:9606"

FEATURES

source

/clone_lib="Melton Normalized Human Islet 4 N4-HIS 1".
 /sex="Both"
 /tissue_type="Islets of Langerhans"
 /dev_stage="Adult"
 /lab_host="DH10B"
 /note="Organ: Pancreas; Vector: pSPORT1; Site: 1; Not 1;
 Site 2: Sal 1; Starting library constructed using
 SuperScript Plasmid Library kit (Life Technologies). cDNA
 made by oligo-dT priming. Size-selected by column
 fractionation; average insert size 1.08 kb. Library was
 amplified once on solid support and plasmid DNA from
 library was prepared. The library DNA was normalized by
 method #4 from Bonaldo, Lennon, and Soares 1996 Genome
 Research 6:791-806; 0.5 microgram single-stranded library
 plasmid DNA was mixed with 5 micrograms PCR product
 representing library inserts and hybridized to an EcoT of
 20. Single-stranded (unhybridized) plasmids were isolated
 by hydroxyapatite chromatography and used to make this
 library."

BASE COUNT 23 a 25 c 12 g 15 t
 ORIGIN

Query Match 89.3%; Score 13.4; DB 10; Length 75;
 Best Local Similarity 93.3%; Pred. No. 5.8e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 tccatggtgctcaact 15
 | |||||
 Db 50 TACATGGTCTCACT 36

RESULT 2

AI022662

LOCUS 58 bp mRNA linear EST 18-JUN-1998
 DEFINITION ox05h11.x1 Soares fetal_liver_spleen_INFLS.S1 Homo sapiens cDNA
 clone IMAGE:1655493 3' similar to SW:TCX1_HUMAN Q15763 T-COMPLEX
 TESTIS-SPECIFIC PROTEIN 1 HOMOLOG ;, mRNA sequence.

ACCESSION AI022662

VERSION AI022662.1 GI:3237903

KEYWORDS EST.

SOURCE human.

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 58)

NCI-CCAP http://www.ncbi.nlm.nih.gov/ncicgap.

National Cancer Institute, Cancer Genome Anatomy Project (CGAP),

Tumor Gene Index

Unpublished (1997)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-remail.nih.gov

This clone is available royalty-free through LLNL; contact the

IMAGE Consortium (info@image.llnl.gov) for further information.

Trace considered overall poor quality

Seq primer: -40ml3 fwd. EF from Amersham

High quality sequence stop: 1.

Location/Qualifiers

1..58

/organism="Homo sapiens"

/db_xref="taxon:9606"

/clone_lib="IMAGE:1655493"

/dev_stage="20 week-post conception fetus"

/lab_host="DH10B (ampicillin resistant)"

/note="Organ: Liver and Spleen; Vector: pT7T3D (Pharmacia)

with a modified polylinker; Site_1: Pac I; Site_2: Eco RI;

This is a subtracted version of the original Soares fetal

liver spleen INFLS library. 1st strand cDNA was primed

with a Pac I - oligo(dT) primer [5',

AACTGGAAGATTAATAAGATCTTTTCTTTTCTTTT 3'],

double-stranded cDNA was ligated to Eco RI adaptors

(Pharmacia), digested with Pac I and cloned into the Pac I
 and Eco RI sites of the modified pT7T3 vector. Library
 went through one round of normalization. Library
 constructed by Bento Soares and M.Fatima Bonaldo."

BASE COUNT 14 a 18 c 8 g 17 t
 ORIGIN

Query Match 82.7%; Score 12.4; DB 9; Length 58;
 Best Local Similarity 92.9%; Pred. No. 1.7e+04;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 ccattggtgctcaact 15
 | |||||
 Db 37 CAATGGTCTCACT 50

RESULT 3

AL362924

LOCUS 74 bp mRNA linear EST 04-AUG-2000
 DEFINITION AL362924 ICRFP 522 and 523 Mus musculus cDNA clone K9303B05 5',
 mRNA sequence.

ACCESSION AL362924

VERSION AL362924.1 GI:9692322

KEYWORDS EST.

SOURCE house mouse.

ORGANISM Mus musculus

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 1 (bases 1 to 74)

Eickhoff,H., Schuchhardt,J., Ivanov,I., Meier-Ewert,S., O'Brien,J.,
 Malik,A., Tandon,N., Wolski,E., Kohls,E., Nyarsik,L., Reinhardt,R.,
 Nietfeld,W. and Lehrach,H.

Tissue gene expression analysis using arrayed normalized cDNA

libraries

Genome Res. (2000) In press

Contact: MPING

Abt.Lehrach

Max Planck Institut Fuer Molekulare Genetik

Innestrasse 73, Berlin, 14195 Germany

The cDNA libraries ICRFP 522 and 523 were normalized with

oligonucleotide fingerprinting, resulting in a unique subset of

5376 cDNA clones.

Location/Qualifiers

1..74

/organism="Mus musculus"

/strain="Black 6"

/db_xref="taxon:10090"

/clone="K9303B05"

/clone_lib="ICRFP 522 and 523"

/tissue_type="embryo"

/dev_stage="9 and 12 pc embryo"

22 a 14 c 26 g 12 t

BASE COUNT

ORIGIN

Query Match 82.7%; Score 12.4; DB 9; Length 74;
 Best Local Similarity 92.9%; Pred. No. 1.8e+04;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 ccattggtgctcaact 15
 | |||||
 Db 8 CCATGGTCTCTCT 21

RESULT 4

W15664

LOCUS

DEFINITION W15664 77 bp mRNA linear EST 10-SEP-1996
 mb52d02.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone
 IMAGE:333027 5', similar to gb:V00714 Mouse gene for alpha-globin
 (MOUSE);, mRNA sequence.

ACCESSION W15664

VERSION W15664.1 GI:1290047

KEYWORDS
SOURCE
ORGANISM

EST.
house musculus
Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 77)
Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T.,
Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,
Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B.,
Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
Waterston,R.
The WashU-HMMI Mouse EST Project
Unpublished (1996)
Contact: Marra M/Mouse EST Project
WashU-HMMI Mouse EST Project
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL ; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
MG1:214427

TITLE
JOURNAL
COMMENT

High quality sequence stop: 70.
Location/Qualifiers
1. .77
/organism="Mus musculus"
/db_xref="taxon:10090"
/clone="IMAGE:333027"
/clone_lib="Soares mouse p3NMF19.5"
/dev_stage="19.5 dpc total fetus"
/lab_host="DH10B (ampicillin resistant)"
/note="Vector: p7T3D (Pharmacia) with a modified
polylinker; Site_1: Not I; Site_2: Eco RI; 1st strand cDNA
was primed with a Not I - oligo(dT) primer [5',
TGTTACCACTCAAGTGGAGCGCGCATTTTTTTTTTTT 3'],
double-stranded cDNA was size selected, ligated to Eco RI
adapters (Pharmacia), digested with Not I and cloned into
the Not I and Eco RI sites of a modified p7T3 vector
(Pharmacia). Library went through one round of
normalization to a Cot = 5. Library constructed by Bento
Soares and M.Fatima Bonaldo. RNA was kindly provided by
Dr. Minoru KO (Wayne State University)."
23 a 15 c 28 g 11 t

FEATURES
source

Query Match 82.7%; Score 12.4; DB 10; Length 77;
Best Local Similarity 92.9%; Pred. No. 1.8e+04;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 2 ccattggtgctcact 15
|||||
Db 18 CCATGGTGTCTCT 31

RESULT 5
AV832470/c

LOCUS
AV832470 K. Sato unpublished cDNA library: Hordeum vulgare subsp.
vulgare leaves vegetative stage Hordeum vulgare subsp. vulgare cDNA
clone baak3f24, mRNA sequence.
ACCESSION
AV832470
VERSION
AV832470.1 GI:14524559
KEYWORDS
EST.
ORGANISM
Hordeum vulgare subsp. vulgare.
Eukaryota; Viridiplantae; Streptophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Pooideae
1 (bases 1 to 80)
Sato,K.

TITLE
JOURNAL
COMMENT

Barley EST sequencing project in NIG and Okayama Univ
Unpublished (2001)
Contact: Kazuhiro Sato
Research Institute for Bioresources
Okayama University, Barley Germplasm Center
Chuo 2-20-1, Kurashiki, Okayama 710-0046, Japan
Email: kazsato@rib.okayama-u.ac.jp,
URL:http://www.rib.okayama-u.ac.jp/barley/
Sato,K., Saisho,D., Takeda,K., Shini,T. and Kohara,Y. Direct
submission:
database:http://www.shigen.nig.ac.jp/barley/Barley.html.
Location/Qualifiers
1. .80
/organism="Hordeum vulgare subsp. vulgare"
/cultivar="Akashinriki"
/db_xref="taxon:112509"
/clone="baak3f24"
/clone_lib="K. Sato unpublished cDNA library: Hordeum
vulgare subsp. vulgare leaves vegetative stage"
/tissue_type="leaves"
/dev_stage="vegetative stage"
25 a 13 c 22 g 14 t 6 others

FEATURES
source

Query Match 82.7%; Score 12.4; DB 9; Length 80;
Best Local Similarity 92.9%; Pred. No. 1.9e+04;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 2 ccattggtgctcact 15
|||||
Db 14 CCATGGTGTCTCT 1

RESULT 6
AZ648327/c

LOCUS
AZ648327 Mouse 10kb plasmid UUGC1M library Mus musculus genomic
clone UUGC1M0517K13 F, DNA sequence.
ACCESSION
AZ648327
VERSION
AZ648327.1 GI:11780683
KEYWORDS
GSS.
SOURCE
house musculus
ORGANISM
Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 62)
Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,
Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly
M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausen,A.
and Wright,D., Weiss,R.
Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
Unpublished (2000)
Contact: Robert B. Weiss
University of Utah Genome Center
University of Utah
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00
Plate: 0517 row: K column: 13
Seq primer: CGTTGTAAACGACGCCAGT
Class: plasmid ends
High quality sequence stop: 62.
Location/Qualifiers
1. .62
/organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="UUGC1M0517K13"

FEATURES
source

Query Match 82.7%; Score 12.4; DB 10; Length 77;
Best Local Similarity 92.9%; Pred. No. 1.8e+04;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 2 ccattggtgctcact 15
|||||
Db 18 CCATGGTGTCTCT 31

/clone_lib="Mouse 10kb plasmid UUGC1M library"

/sex="Male"
/lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
/note="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource
(http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adapted DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (gil4732114[gb]AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adapted mouse DNA was annealed to adapted vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

BASE COUNT 11 a 20 c 15 g 16 t
ORIGIN

Query Match 80.0%; Score 12; DB 12; Length 62;
Best Local Similarity 100.0%; Pred. No. 2.7e+04;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 ccattggtgctca 13
|||||

Db 45 CCATGGTCTCA 34

RESULT 7

TA138D06P 82 bp DNA linear GSS 13-DEC-2000
LOCUS
DEFINITION TA138D06P 82 bp DNA linear GSS 13-DEC-2000 genomic survey sequence.

ACCESSION AL465857

VERSION AL465857.1 GI:11835283

KEYWORDS GSS.

SOURCE Trypanosoma brucei.

ORGANISM Trypanosoma brucei

REFERENCE Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae;

AUTHORS Hall, N., Bowman, S., Lennard, N.J., Doggett, J., Atkin, R.,

Chillingworth, C., Ormond, D., Harris, B., El-Sayed, N., Hou, L.,

Melville, S.E., Rajadream, M.A. and Barrell, B.G.

Direct Submission

TITLE Submitted (10-DEC-2000)

JOURNAL Trypanosoma brucei genome sequencing

COMMENT Project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton,

Cambridge CB10 1SA, E-mail: barrell@sanger.ac.uk and

nh@sanger.ac.uk

Constructed at the Institute for Genomic Research (TIGR),

Rockville, MD. Genomic DNA isolated from a cloned population of

Trypanosoma brucei (TREU927/4 GUTat 10.1) was mechanically sheared

to give a tight size distribution (

4 kb). The v + i method used for the library construction is

described in detail in Smith, H. and Venter, J.C. (Making small

insert libraries for whole genome shotgun sequencing projects. In

Genome Sequencing: A Practical Approach, eds. M. Vaudin and B.

Barrell, Oxford University Press, 1999).

Email: nelsayed@tigr.org

Details of T. brucei sequencing at the Sanger Centre are available

at http://www.sanger.ac.uk/Projects/T-brucei/.

Location/Qualifiers

1. .82

source

/organism="Trypanosoma brucei"

/strain="TREU927"

/db_xref="taxon:5691"

BASE COUNT 33 a 13 c 12 g 24 t
ORIGIN

Query Match 80.0%; Score 12; DB 12; Length 82;
Best Local Similarity 100.0%; Pred. No. 3e+04;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4 atggtgctcact 15
|||||

Db 60 ATGGTGCTCACT 71

RESULT 8

AI930840/c

LOCUS

DEFINITION

AI930840.y1 Gm-cl015 Glycine max cDNA clone

EST

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

Glycine max

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;

Rosidae; eurosids I; Fabales; Fabaceae; Papilionoideae; Phaseoleae;

Glycine.

REFERENCE 1 (bases 1 to 85)

AUTHORS Shoemaker, R., Keim, P., Vodkin, L., Erpelting, J., Coryell, V., Khanna

, A., Bolla, B., Marra, M., Hillier, L., Kucaba, T., Martin, J., Beck, C.,

Wylie, T., Underwood, K., Steptoe, M., Theising, B., Allen, M., Bowers

, Y., Person, B., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk

, R., Ritter, E., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann

, R., Waterston, R. and Wilson, R.

Public Soybean EST Project

Unpublished (1999)

CONTACT: Shoemaker R/Public Soybean EST Project

Public Soybean EST Project

Washington University School of Medicine

4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA

Tel: 314 286 1800

Fax: 314 286 1810

Email: est@wustl.edu

Trace considered overall poor quality

Possible reversed clone: similarity on wrong strand This clone is

available through: Resgen, Invitrogen Corp. 2130 South Memorial

Parkway Huntsville, AL 35801 For further information call: (800

) 533-4363 or contact via email: ccu@resgen.com

Seq primer: -40Kp from Gibco

High quality sequence stop: 1.

Location/Qualifiers

1. .85

source

/organism="Glycine max"

/db_xref="taxon:3847"

/clone="GENOME SYSTEMS CLONE ID: Gm-cl015-11"

/clone_lib="Gm-cl015"

/tissue_type="Mature flowers, field grown plants"

/lab_host="XL10-Gold"

/note="Vector: pBluescript II XR; Site_1: EcoRI; Site_2:

XhoI; This cDNA library was constructed from mRNA isolated

from mature flowers of field grown plants. The cDNA

library was prepared using the Stratagene pBluescript II

XR cDNA library construction kit. Complementary DNA was

synthesized from mRNA using a primer consisting of a poly

(dT) sequence with a XhoI restriction site. EcoRI adapters

were ligated to the blunt-ended cDNA fragments followed by

XhoI digestion. The cDNA fragments were directionally

cloned into the EcoRI-XhoI restriction site of the

pBluescript vector. The ligated cDNA fragments were

transformed into XL10-Gold host cells. This library was

constructed by Dr. Randy Shoemaker and Dr. John

Qy 3 catggtgctcac 14

```

Qy 3 catggtgctcac 14
Db 16 CATGCTGCTCAC 5

RESULT 11
TA358F01P/c
LOCUS
DEFINITION T. brucei sheared genomic DNA clone 358f01, forward sequence,
genomic survey sequence.
ACCESSION AL494114
VERSION AL494114.1 GI:11870743
KEYWORDS GSS.
SOURCE Trypanosoma brucei.
ORGANISM Trypanosoma brucei
Eukaryota; Euklenozoa; Kinetoplastida; Trypanosomatidae;
Trypanosoma.
1 (bases 1 to 38)
Hall,N., Bowman,S., Lennard,N.J., Doggett,J., Atkin,R.,
Chillingworth,C., Ormond,D., Harris,B., El-Sayed,N., Hou,L.,
Melville,S.E., Rajandream,M.A. and Barrell,B.G.
Direct Submission
Submitted (10-DEC-2000) Trypanosoma brucei genome sequencing
project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton,
Cambridge CB10 1SA, E-mail: barrell@sanger.ac.uk and
nh@sanger.ac.uk
COMMENT Constructed at the Institute for Genomic Research (TIGR),
Rockville, MD. Genomic DNA isolated from a cloned population of
Trypanosoma brucei (TREU927/4 GUTat 10.1) was mechanically sheared
to give a tight size distribution (
4 kb). The v + i method used for the library construction is
described in detail in Smith, H. and Venter, J.C. (Making small
insert libraries for whole genome shotgun sequencing projects. In
Genome Sequencing: A Practical Approach, eds. M. Vaudin and B.
Barrell, Oxford University Press, 1999).
Email: nelsavedet@ig.org
Details of T. brucei sequencing at the Sanger Centre are available
at http://www.sanger.ac.uk/Projects/T_brucei/.
FEATURES
source
1..38
/organism="Trypanosoma brucei"
/strain="TREU927"
/db_xref="taxon:5691"
/clone="358f01"
BASE COUNT 16 a 5 c 6 g 11 t
ORIGIN

Query Match 78.7% Score 11.8; DB 12; Length 38;
Best Local Similarity 86.7%; Pred. No. 2.9e+04;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 tccatggtgctcac 15
Db 30 TCCATGTGTCACAT 16
|||||
|

RESULT 12
AA285022
LOCUS
DEFINITION zt25e10.s1 Soares ovary tumor NBHOT Homo sapiens CDNA clone
IMAGE:714186 3' similar to gb:X57809 IG LAMBDA CHAIN C REGIONS
(HUMAN);, mRNA sequence.
ACCESSION AA285022
VERSION AA285022.1 GI:1927703
KEYWORDS EST.
SOURCE Homo sapiens.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 65)
Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S.,
Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M., Martin,J., Moore,B.

```

```

, Schellenberg,K., Steptoe,M., Tan,F., Theising,B., White,Y., Wylie
,T., Waterston,R. and Wilson,R.
WashU-Merck EST Project 1997
Unpublished (1997)
Contact: Wilson RK
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
Seq primer: -41m13 fwd. ET from Amersham.
FEATURES
Location/Qualifiers
1..65
/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:714186"
/clone_lib="Soares ovary tumor NBHOT"
/sex="Female"
/tissue_type="ovarian tumor"
/lab_host="DH10B (ampicillin resistant)"
/note="Organ: ovary; Vector: pT73D (Pharmacia) with a
modified polylinker; Site.1: Not I; Site.2: Eco RI; 1st
Strand cDNA was primed with a Not I oligo(dT) primer [5'
TGTTACCAATCTGAAGTGGAGCGCGCGGTTTTTTTTTTTTTTT 3'],
double-stranded cDNA was size selected, ligated to Eco RI
adapters (Pharmacia), digested with Not I and cloned into
the Not I and Eco RI sites of a modified pT73 vector
(Pharmacia). Library constructed by Bento Soares and
M.Fatima Bonaldo."
BASE COUNT 7 a 21 c 17 g 20 t
ORIGIN

Query Match 78.7% Score 11.8; DB 9; Length 65;
Best Local Similarity 86.7%; Pred. No. 3.5e+04;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 tccatggtgctcac 15
Db 23 TCCACGGTGCTCCCT 37
|||||
|

RESULT 13
AA2799758
LOCUS
DEFINITION 2M0057G19f Mouse 10kb plasmid UUGCIM library Mus musculus genomic
clone UUGC2M0057G19 F, DNA sequence.
ACCESSION AA2799758
VERSION AA2799758.1 GI:12951196
KEYWORDS GSS.
SOURCE house mouse.
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
1 (bases 1 to 72)
Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,
Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly
,M., Rose,M., Rose,R., Stokes,R., Tingey,A., von Niederhausern,A.
and Wright,D., Weiss,R.
Mouse whole genome scaffolding with paired end reads from 10kb
plasmid inserts
Unpublished (2000)
Contact: Robert B. Weiss
University of Utah Genome Center
University of Utah
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
84112, USA
Tel: 801 585 5606
Fax: 801 585 7177
Email: ddunn@genetics.utah.edu
Insert Length: 10000 Std Error: 0.00

```

Plate: 0057 row: G column: 19
 Seq primer: CGTTGTAACACGACGCCACT
 Class: plasmid ends
 High quality sequence stop: 72.
 Location/Qualifiers

FEATURES

source

1. 72
 /organism="Mus musculus"
 /strain="C57BL/6J"
 /db_xref="taxon:10090"
 /clone="UUGC2M0057G19"
 /clone_lib="Mouse 10kb plasmid UUGC1M library"
 /sex="Male"
 /lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
 /note="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA resource (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of pWD42 (g14732114|gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptor mouse DNA was annealed to adaptor vector DNA, and transformed into chemically-competent E. coli XL10-Gold (Stratagene) cells and selected for ampicillin resistance."

BASE COUNT
 ORIGIN

13 a 18 c 16 g 25 t

Query Match 78.7%; Score 11.8; DB 12; Length 72;
 Best Local Similarity 86.7%; Pred. No. 3.6e+04;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 tccatggtgctcact 15
 ||||| ||||| ||
 Db 48 TCCATGTTGCTCATT 62

RESULT 14
 BI472373/c

LOCUS BI472373 89 bp mRNA linear EST 24-AUG-2001
 DEFINITION f502d01.y1 Zebrafish adult olfactory Danio rerio cDNA clone 5002416
 5', mRNA sequence.

ACCESSION BI472373
 VERSION BI472373.1 GI:15288482
 KEYWORDS EST.
 SOURCE zebrafish.

ORGANISM

Danio rerio
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes; Cyprinidae; Danio.

REFERENCE

AUTHORS

1 (bases 1 to 89)
 Clark, M., Johnson, S.L., Lehrach, H., Lee, R., Li, F., Marra, M., Eddy, S., Hillier, L., Kucaba, T., Martin, J., Beck, C., Wylie, T., Underwood, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Person, B., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk, R., Ritter, E., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R., Waterston, R. and Wilson, R.

WashU Zebrafish EST Project 1998

Unpublished (1998)

Contact: Stephen L. Johnson

Washington University School of Medicine

4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA

Tel: 314 286 1800

Fax: 314 286 1810

Email: zbrafish@watson.wustl.edu

CDNA Library Preparation: John Ngai cDNA Library Arrayed by: Matthew Clark. DNA Sequencing by: Washington University Genome Sequencing Center Clone Distribution: Genome Systems, St. Louis, Missouri (web address: www.genomesystems.com) (email contact: info@genomesystems.com) and Research Genetics, Huntsville, Alabama (web address: www.resgen.com) (email contact: info@resgen.com) and RessourcenzentrumPrimatDatenbank, Berlin, Germany (web address: www.rzpd.de).

FEATURES

source

1. 89
 /organism="Danio rerio"
 /db_xref="taxon:7955"
 /clone_lib="Zebrafish adult olfactory"
 /sex="mixed"
 /tissue_type="Olfactory rosettes"
 /dev_stage="adult"
 /lab_host="D10Hb (Gibco BRL)"
 /note="Vector: pSPORT1; Site_1: NotI; Site_2: SalI; This is a directionally cloned cDNA library from adult Zebrafish olfactory epithelium."

BASE COUNT
 ORIGIN

26 a 21 c 25 g 17 t

Query Match 78.7%; Score 11.8; DB 10; Length 89;
 Best Local Similarity 86.7%; Pred. No. 3.9e+04;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 tccatggtgctcact 15

||||| ||||| ||

Db 67 TCCATGTTCTCTCT 53

RESULT 15

AV834264

LOCUS

AV834264 91 bp mRNA linear EST 22-JUN-2001
 DEFINITION K. Sato unpublished cDNA library: Hordeum vulgare subsp. vulgare shoots germination Hordeum vulgare subsp. vulgare cDNA clone rbags8j18, mRNA sequence.

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

Hordeum vulgare subsp. vulgare.
 Hordeum vulgare subsp. vulgare
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Poideae; Triticeae; Hordeum.

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

Barley EST sequencing project in NIG and Okayama Univ

Unpublished (2001)

Contact: Kazuhiro Sato

Research Institute for Bioresources

Okayama University, Barley Germplasm Center

Chuo 2-20-1, Kurashiki, Okayama 710-0046, Japan

Email: kazsato@rib.okayama-u.ac.jp,

URL: http://www.rib.okayama-u.ac.jp/barley/

Sato, K., Saisho, D., Takeda, K., Shini, T. and Kohara, Y. Direct

submission;

database: http://www.shigen.nig.ac.jp/barley/Barley.html.

FEATURES

source

1. 91

/organism="Hordeum vulgare subsp. vulgare"

/cultivar="Haruna Nijo"

/db_xref="taxon:112509"

/clone_lib="K. Sato unpublished cDNA library: Hordeum

vulgare subsp. vulgare shoots germination"

/tissue_type="shoots"

/dev_stage="germination"

13 a 25 c 22 g 29 t

2 others

BASE COUNT

ORIGIN

Query Match 78.7%; Score 11.8; DB 9; Length 91;
 Best Local Similarity 86.7%; Pred. No. 3.9e+04;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 tccatggtgctcact 15
 Db 18 TCCGTGCTGCTCACT 32

Search completed: July 21, 2002, 03:21:21
 Job time: 16896 sec